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SANITARY SEWER REPORT

Lauriston Park
Block 124, Lot 31
Borough of Rumson
Monmouth County, NJ

Prepared For:
Yellow Brook Property Co., LLC
247 Bridge Ave., Suite 5
Red Bank, NJ 07701



September 2021
FPA No. 15053.003

INTRODUCTION

The subject property is located at 91 Rumson Road in the Borough of Rumson, Monmouth County, New Jersey and is known as Block 124, Lot 31. The following Sanitary Sewer Report has been prepared for the Lauriston Park Residential Development. This report provides a description of the existing site condition, a description of the proposed development, an overview of the Osprey Lane Sanitary sewer system, an overview of the inspection and repair services that were performed on the Osprey Lane system, the projected sanitary sewer demand, an analysis of the development impact along with a closing statement.

EXISTING SITE CONDITIONS

The site is currently developed as a single-family residential use and includes a two and a half-story residential dwelling, access driveways, patios, porches and a detached garage. The property has site frontage along Rumson Road, Tuxedo Road and Osprey Lane (***See Below***).



The residential dwelling is served by a sanitary sewer lateral that connects to the Borough of Rumson sanitary sewer system.

PROPOSED DEVELOPMENT

The property was subject to an affordable housing settlement agreement which rezoned the property to permit the development of up to 14 residential dwellings.

In accordance with the settlement agreement and the Rumson Road Housing District zone, the applicant is proposing to construct 14 residential dwellings that will be located within six building units. The residential development will consist of two triplex buildings, two carriage homes and two duplex units. Each dwelling will have three-bedrooms and will be served by a new sanitary sewer main that will be extended from the existing main located within Osprey Lane into the subject property.

BOROUGH SANITARY SEWER SYSTEM IN OSPREY LANE

An existing 8-inch clay sanitary sewer main is located within the Osprey Lane right-of-way and extends south to the intersection with Shrewsbury Drive. From there, the main increases to a 12-inch clay main and extends east along Shrewsbury Drive to a lift (pump) station located at the corner of Avenue of Two Rivers South (*See Below*).



Our office had met with the Borough's Department of Public Utilities and the Borough Engineer to discuss the proposed development and the connection to the sanitary sewer system within Osprey Lane. The DPU and Borough Engineer confirmed that the existing system is a gravity main

that extends from Osprey Lane to the lift (pump) station at the intersection of Shrewsbury Drive and Avenue of Two Rivers South. It was noted that the lift station receives heavy loading during the wet season (February through May) and times of high groundwater fluctuations. The Borough Engineer indicated that the Borough engaged the services of a sewer maintenance contractor to perform a video inspection of several sanitary sewer mains throughout the Borough. The inspection revealed that these mains encountered occasional increase in flow from fluctuating groundwater that enters the system through pipe joint failures or cracks. The Borough authorized the contractor to grout the areas of observed pipe failure and open joints. The Borough Engineer indicated that since the grout operation was performed in these mains, there has been a noticeable decrease in flow within the system.

VIDEO INSPECTION AND GROUT REPAIR OF THE OSPREY LANE SYSTEM

As discussed above, the Borough indicated that the Osprey Lane sanitary sewer main experiences periodic fluctuations in flow. The applicant, Yellowbrook Property Company (YPC), offered to engage the services of a sewer maintenance contractor, Oswald Enterprises, to perform a video inspection of the Osprey Lane main similar to what was previously done by the Borough in other sections of the municipality.

Oswald Enterprises was retained by YPC to clean and inspect the sanitary sewer main from Osprey Lane to the pump station, and in addition, repair any joint failures or cracks that are encountered. The approximate length of main that was inspected and repaired is approximately 2,590 linear feet of pipe.

Prior to advancing the video inspection, the main (pipe) needs to be cleaned of all debris. In order to clean the pipe, Oswald begins at the upstream manhole structure and introduces a high volume of water into the main to flush out any trapped or standing debris. A vac-truck is stationed at the next downstream structure where the truck lowers a large vacuum hose into the manhole to collect the debris that is forced from the upstream manhole. This process is repeated between each manhole structure until they reach the lift station.

Once the main is cleaned, the service company lowers a small four-wheeled robot into the first upstream manhole structure. The robot has a video camera mounted to its frame and the robot is advanced down the pipe. An inspector is stationed at the road elevation and observes the video as the robot proceeds down the pipe. Any cracks, open joints, failures, etc. that are encountered are noted in the video and log sheet. YBC also authorized Oswald to apply chemical grout to seal any cracks or open joints that were found. The inspection and grouting operations were continued along the entire main to the lift station. Upon completion of their services, a report was generated noting the pipe defects, the location in the pipe, the size of the defect, and the amount of grout applied to remedy the failure. A copy of this report can be found in **Appendix A**.

PROJECTED SANITARY SEWER DEMAND

The following describes the projected sanitary sewer flow for the proposed development as per N.J.A.C. 7:14A-23.3.

Existing Conditions

The property is developed and includes a 2 ½ story 6 Bedroom single family dwelling:

Residential Dwellings – Single Family Home

3 Bedroom Unit or Larger - 300 Gallons Per Day (GPD)

$$Q_{\text{existing}} = 1 \times 300 \text{ GPD}$$

$$Q_{\text{existing}} = 300 \text{ GPD}$$

Proposed Conditions

The proposed development includes 14 residential units:

Residential Dwellings – Single Family Home, Duplexes, Townhouses

3 Bedroom Unit or Larger - 300 Gallons Per Day (GPD)

$$Q_{\text{proposed}} = 14 \times 300 \text{ GPD}$$

$$Q_{\text{proposed}} = 4,200 \text{ GPD}$$

Net Increase

The increase in post development sanitary sewer flow is:

$$Q_{\text{increase}} = Q_{\text{proposed}} - Q_{\text{existing}}$$

$$Q_{\text{increase}} = 4,200 \text{ GPD} - 300 \text{ GPD}$$

$$Q_{\text{increase}} = 3,900 \text{ GPD}$$

DEVELOPMENT IMPACT ANALYSIS

Our office provided a copy of the Oswald report to the Borough Engineer for his review and files at the completion of the video inspection and grouting services that were engaged by YPC **(Appendix A)**.

We contacted the Borough Engineer to discuss the findings, the repairs performed and the proposed development flows. The Borough Engineer indicated that the conditions encountered, and the repairs performed, were similar to other inspections and repair projects that the Borough had advanced previously. The Borough Engineer provided us with data from a previous grouting operation that was advanced at the Riverside Drive sewer main, which resulted in a net flow reduction of 7.19 gallons per liner foot of pipe **(See Appendix B)**.

In review of the Oswald report for the Osprey Lane and Shrewsbury Drive sanitary sewer main, 2,590 linear feet of pipe was cleaned, inspected and repaired. Utilizing the data provided by the Borough Engineer relating to the flow reduction exhibited on the recent Riverside Drive project of 7.19 gallons per linear foot, we reduced this number by half as a conservative approach. Using a flow reduction of 3.60 gallons per foot and a total main length of 2,590 linear feet, the flow reduction that would be expected in this main is approximately 9,300 gallons per day (GPD).

CLOSING

The reduction in flow from the inspection and grouting operations that were advanced within this system will provide a net benefit to the Borough's sanitary sewer main and lift station and will offset the proposed development flow of 3,900 GPD, resulting in a net decrease in flow in the Borough's sanitary sewer system of approximately 5,400 GPD.

APPENDIX A

OSWALD ENTERPRISES – TV INSPECTION AND CHEMICAL GROUTING REPORT

Oswald ENTERPRISES, INC.

YELLOW BROOK PROPERTY COMPANY
247 BRIDGE AVENUE
RED BANK, NEW JERSEY 07701

DVD 1
T.V. INSPECTION AND CHEMICAL GROUTING
OF VARIOUS SANITARY SEWER LINES
OSPREY LANE, RUMSON

AUGUST 5 AND 6, 2021

OSWALD ENTERPRISES, INC.
161 EAST ROAD - P.O. BOX 126
BELFORD, NEW JERSEY 07718

Main Office: 161 East Road, P.O. Box 126, Belford, New Jersey 07718
Phone: 732-787-1436 • Fax: 732-495-4990
www.OswaldEnt.com

Main Inspections Small Photos

Mainline ID: RUMSON OSPREY LN 89 TO 88	City: RUMSON NJ	Address: OSPREY LN	Project name: 8/5/21 RUMSON OSPREY LN
Start date/time: 8/5/2021 8:12 AM	Asset length: 404.8 ft.	Weather: Dry	Operator: John Read
Upstream node: 89	Depth US:	Downstream node: 88	Depth DS:
Pipe shape: Circular	Pipe material: Clay ESVP	Pipe height: 8.0 in.	Pipe width:
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
8.1 ft.	D	1.2 ft.	6 /	Crack Joint	Longitudinal		
8.6 ft.	D		/	Infiltration	Crack Runner		
13.1 ft.	D		/	Joint - Infiltration	Weeper		
24.1 ft.	D		12 /	Lateral			
25.7 ft.	D		/	Joint - Infiltration	Weeper		
30.7 ft.	D		/	Infiltration	Crack Weeper		
30.7 ft.	D	0.9 ft.	7 /	Crack Joint	Longitudinal		
37.4 ft.	D		9 /	Lateral	Capped		
48.0 ft.	D		/	Infiltration	Crack Runner		
48.0 ft.	D	1.0 ft.	7 /	Crack Joint	Longitudinal		
58.1 ft.	D	1.1 ft.	5 /	Crack Joint	Longitudinal		
58.4 ft.	D		/	Infiltration	Crack Weeper		

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
68.3 ft.	D		/	Joint - Infiltration	Weeper		
68.3 ft.	D	1.6 ft.	12 /	Crack Joint	Longitudinal		
73.5 ft.	D		/	Infiltration	Crack Weeper		
73.5 ft.	D	1.7 ft.	2 /	Crack Joint	Longitudinal		
136.8 ft.	D	1.1 ft.	9 /	Crack	Longitudinal		
140.5 ft.	D		/	Joint - Infiltration	Runner		
140.5 ft.	D	0.0 ft.	2 /	Crack Joint	Longitudinal		
223.2 ft.	D	3.9 ft.	3 /	Crack	Longitudinal		
279.2 ft.	D		12 /	Lateral			
285.9 ft.	D		/	Joint - Infiltration	Weeper		
331.8 ft.	D	0.9 ft.	1 /	Crack Joint	Longitudinal		
348.1 ft.	D	1.0 ft.	9 /	Crack Joint	Longitudinal		
352.3 ft.	D	1.4 ft.	9 /	Crack Joint	Longitudinal		
363.1 ft.	D		/	Joint - Infiltration	Runner		
363.1 ft.	D	1.0 ft.	3 /	Crack Joint	Longitudinal		
368.3 ft.	D	1.0 ft.	3 /	Crack Joint	Longitudinal		
383.8 ft.	D	1.0 ft.	/	Crack Joint	Longitudinal		
399.2 ft.	D		/	Joint	Other		
404.8 ft.	D		/	Inspection	End		

Inspection's photos

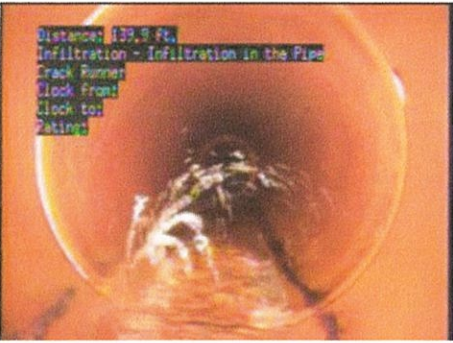
Main Inspections Small Photos

Mainline ID: RUMSON OSPREY LN 88 TO 87	City: RUMSON NJ	Address: OSPREY LN	Project name: 8/5/21 RUMSON OSPREY LN
Start date/time: 8/5/2021 9:14 AM	Asset length: 407.0 ft.	Weather: Dry	Operator: John Read
Upstream node: 88	Depth US:	Downstream node: 87	Depth DS:
Pipe shape: Circular	Pipe material: Clay ESVP	Pipe height: 8.0 in.	Pipe width:
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
4.3 ft.	D		/	Joint	Other		
10.3 ft.	D		/	Joint	Other		
36.3 ft.	D		12 /	Lateral			
99.2 ft.	D	1.7 ft.	3 /	Crack Joint	Longitudinal		
109.4 ft.	D	2.4 ft.	6 /	Crack Joint	Longitudinal		
114.4 ft.	D	1.1 ft.	2 /	Crack Joint			
125.7 ft.	D		/	Joint - Infiltration	Weeper		
125.7 ft.	D	1.0 ft.	9 /	Crack	Longitudinal		
129.9 ft.	D	1.0 ft.	/	Crack Joint	Longitudinal		
134.9 ft.	D		/	Joint - Infiltration	Stain		
139.9 ft.	D	1.0 ft.	7 /	Crack Joint			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
139.9 ft.	D		/	Infiltration	Crack Runner		
							
151.0 ft.	D		12 /	Lateral			
191.6 ft.	D		/	Crack	Circular		
343.1 ft.	D	1.0 ft.	10 /	Crack Joint	Longitudinal		
403.3 ft.	D	1.0 ft.	7 /	Crack Joint	Longitudinal		
407.0 ft.	D		/	Inspection	End		

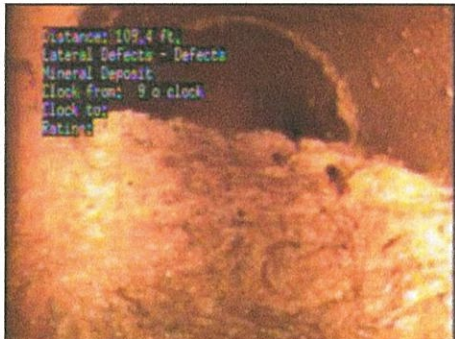
Inspection's photos

Main Inspections Small Photos

Mainline ID: RUMSON OSPREY LN 87 TO 85	City: RUMSON NJ	Address: OSPREY LN	Project name: 8/5/21 RUMSON OSPREY LN
Start date/time: 8/5/2021 10:40 AM	Asset length: 396.3 ft.	Weather: Dry	Operator: John Read
Upstream node: 87	Depth US:	Downstream node: 85	Depth DS:
Pipe shape: Circular	Pipe material: Clay ESVP	Pipe height: 8.0 in.	Pipe width:
Comments:			

Observations

Distance	Dir. Length	From/To	Code	Modifier/Severity	Rating	Comments
5.3 ft.	D	/	Joint	Other		
11.3 ft.	D	/	Joint	Other		
67.2 ft.	D	/	Joint - Infiltration	Runner		
109.4 ft.	D	9 /	Lateral Defects	Mineral Deposit		



167.4 ft.	D	/	Joint - Infiltration	Runner		
393.1 ft.	D	/	Joint	Other		
396.3 ft.	D	/	Inspection	End		

Inspection's photos

Main Inspections Small Photos

Mainline ID: RUMSON OSPREY LN 89 TO 88	City: RUMSON NJ	Address: OSPREY LN	Project name: 8/5/21 RUMSON OSPREY LN GROUTING
Start date/time: 8/6/2021 7:49 AM	Asset length: 404.8 ft.	Weather: Dry	Operator: John Read
Upstream node: 89	Depth US:	Downstream node: 88	Depth DS:
Pipe shape: Circular	Pipe material: Clay ESVP	Pipe height: 8.0 in.	Pipe width:
Comments:			

Observations

Distance	Dir. Length	From/To	Code	Modifier/Severity	Rating	Comments
1.9 ft.	D	/	Joint	Passed the air test		
8.4 ft.	D	/	Crack Joint			2 GALLONS
13.8 ft.	D	/	Joint	Is Now Sealed		1 GALLON
19.3 ft.	D	/	Joint	Passed the air test		
25.4 ft.	D	/	Joint	Passed the air test		
26.1 ft.	D	/	Joint	Is Now Sealed		1 GALLON
32.2 ft.	D	/	Crack Joint	Is Now Sealed		1 GALLON
36.2 ft.	D	/	Joint	Passed the air test		
38.4 ft.	D	/	Joint	Passed the air test		
43.3 ft.	D	/	Joint	Passed the air test		
48.3 ft.	D	/	Joint	Is Now Sealed		3 GALLONS
53.6 ft.	D	/	Joint	Passed the air test		
59.5 ft.	D	/	Crack Joint	Is Now Sealed		2 GALLONS
65.2 ft.	D	/	Joint	Passed the air test		
69.4 ft.	D	/	Crack Joint	Is Now Sealed		1 GALLON

Observations

Distance	Dir. Length	From/To	Code	Modifier/Severity	Rating	Comments
74.3 ft.	D	/	Crack Joint	Is Now Sealed		2 GALLONS
79.2 ft.	D	/	Joint	Passed the air test		
84.6 ft.	D	/	Joint	Passed the air test		
89.8 ft.	D	/	Joint	Passed the air test		
95.1 ft.	D	/	Joint	Passed the air test		
99.8 ft.	D	/	Joint	Passed the air test		
105.0 ft.	D	/	Joint	Passed the air test		
110.4 ft.	D	/	Joint	Passed the air test		
115.9 ft.	D	/	Joint	Passed the air test		
122.8 ft.	D	/	Joint	Passed the air test		
125.5 ft.	D	/	Joint	Passed the air test		
130.8 ft.	D	/	Joint	Passed the air test		
137.0 ft.	D	/	Joint	Passed the air test		
142.4 ft.	D	/	Crack Joint	Is Now Sealed		2 GALLONS
146.0 ft.	D	/	Joint	Passed the air test		
151.1 ft.	D	/	Joint	Passed the air test		
156.4 ft.	D	/	Joint	Passed the air test		
162.3 ft.	D	/	Joint	Passed the air test		
167.4 ft.	D	/	Joint	Passed the air test		
171.8 ft.	D	/	Joint	Passed the air test		
176.8 ft.	D	/	Joint	Passed the air test		
182.0 ft.	D	/	Joint	Passed the air test		

Observations

Distance	Dir. Length	From/To	Code	Modifier/Severity	Rating	Comments
187.4 ft.	D	/	Joint	Passed the air test		
193.5 ft.	D	/	Joint	Passed the air test		
197.9 ft.	D	/	Joint	Passed the air test		
202.4 ft.	D	/	Joint	Passed the air test		
207.7 ft.	D	/	Joint	Passed the air test		
213.9 ft.	D	/	Joint	Passed the air test		
219.2 ft.	D	/	Joint	Passed the air test		
226.0 ft.	D	/	Joint	Passed the air test		
228.3 ft.	D	/	Joint	Passed the air test		
233.3 ft.	D	/	Joint	Passed the air test		
239.2 ft.	D	/	Joint	Passed the air test		
244.8 ft.	D	/	Joint	Passed the air test		
249.2 ft.	D	/	Joint	Passed the air test		
254.2 ft.	D	/	Joint	Passed the air test		
259.0 ft.	D	/	Joint	Passed the air test		
264.1 ft.	D	/	Joint	Passed the air test		
269.3 ft.	D	/	Joint	Passed the air test		
274.6 ft.	D	/	Joint	Passed the air test		
280.7 ft.	D	/	Joint	Passed the air test		
281.5 ft.	D	/	Joint	Passed the air test		
286.7 ft.	D	/	Joint	Is Now Sealed		2 GALLONS
292.2 ft.	D	/	Joint	Passed the air test		

Observations

Distance	Dir. Length	From/To	Code	Modifier/Severity	Rating	Comments
297.2 ft.	D	/	Joint	Passed the air test		
302.5 ft.	D	/	Joint	Passed the air test		
307.4 ft.	D	/	Joint	Passed the air test		
312.3 ft.	D	/	Joint	Passed the air test		
317.5 ft.	D	/	Joint	Passed the air test		
322.8 ft.	D	/	Joint	Passed the air test		
328.3 ft.	D	/	Joint	Passed the air test		
333.9 ft.	D	/	Crack Joint	Is Now Sealed		2 GALLONS
338.2 ft.	D	/	Joint	Passed the air test		
343.3 ft.	D	/	Joint	Passed the air test		
348.8 ft.	D	/	Joint	Is Now Sealed		1 GALLON
353.7 ft.	D	/	Crack Joint	Is Now Sealed		1 GALLON
359.4 ft.	D	/	Joint	Passed the air test		
364.4 ft.	D	/	Crack Joint	Is Now Sealed		2 GALLONS
368.4 ft.	D	/	Crack Joint	Is Now Sealed		1 GALLON
374.6 ft.	D	/	Joint	Passed the air test		
379.3 ft.	D	/	Joint	Passed the air test		
384.4 ft.	D	/	Crack Joint	Is Now Sealed		1 GALLON
389.6 ft.	D	/	Joint	Passed the air test		
394.8 ft.	D	/	Joint	Passed the air test		
399.7 ft.	D	/	Joint	Passed the air test		
399.8 ft.	D	/	Inspection	End		

Inspection's photos



Main Inspections Small Photos

Mainline ID: RUMSON OSPREY LN 88 TO 87	City: RUMSON NJ	Address: OSPREY LN	Project name: 8/5/21 RUMSON OSPREY LN GROUTING
Start date/time: 8/6/2021 12:21 PM	Asset length: 407.0 ft.	Weather: Dry	Operator: John Read
Upstream node: 88	Depth US: 	Downstream node: 87	Depth DS:
Pipe shape: Circular	Pipe material: Clay ESVP	Pipe height: 8.0 in.	Pipe width:
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
4.2 ft.	D		/	Joint	Passed the air test		
9.9 ft.	D		/	Joint	Passed the air test		
15.1 ft.	D		/	Joint	Passed the air test		
21.3 ft.	D		/	Joint	Passed the air test		
25.2 ft.	D		/	Joint	Passed the air test		
36.1 ft.	D		/	Joint	Passed the air test		
37.4 ft.	D		/	Joint	Passed the air test		
42.9 ft.	D		/	Joint	Passed the air test		
48.6 ft.	D		/	Joint	Passed the air test		
52.8 ft.	D		/	Joint	Passed the air test		
58.2 ft.	D		/	Joint	Passed the air test		
63.2 ft.	D		/	Joint	Passed the air test		
68.2 ft.	D		/	Joint	Passed the air test		
73.6 ft.	D		/	Joint	Passed the air test		
79.7 ft.	D		/	Joint	Passed the air test		

Observations

Distance	Dir. Length	From/To	Code	Modifier/Severity	Rating	Comments
85.5 ft.	D	/	Joint	Passed the air test		
88.8 ft.	D	/	Joint	Passed the air test		
93.8 ft.	D	/	Joint	Passed the air test		
99.0 ft.	D	/	Crack Joint	Is Now Sealed		2 GALLONS
104.4 ft.	D	/	Joint	Passed the air test		
110.5 ft.	D	/	Joint	Is Now Sealed		1 GALLON
116.7 ft.	D	/	Joint	Is Now Sealed		1 GALLON
116.8 ft.	D	/	Crack	Is Now Sealed		1 GALLON
119.7 ft.	D	/	Joint	Passed the air test		
125.1 ft.	D	/	Joint	Is Now Sealed		1 GALLON
130.3 ft.	D	/	Crack Joint	Is Now Sealed		
131.1 ft.	D	/	Crack	Is Now Sealed		1 GALLON
135.0 ft.	D	/	Joint	Is Now Sealed		1 GALLON
139.7 ft.	D	/	Crack Joint	Is Now Sealed		2 GALLONS
145.2 ft.	D	/	Joint	Passed the air test		
150.3 ft.	D	/	Joint	Passed the air test		
152.2 ft.	D	/	Joint	Passed the air test		
157.3 ft.	D	/	Joint	Passed the air test		
162.8 ft.	D	/	Joint	Passed the air test		
168.1 ft.	D	/	Joint	Passed the air test		
172.8 ft.	D	/	Joint	Passed the air test		
177.9 ft.	D	/	Joint	Passed the air test		

Observations

Distance	Dir. Length	From/To	Code	Modifier/Severity	Rating	Comments
183.2 ft.	D	/	Joint	Passed the air test		
188.3 ft.	D	/	Joint	Passed the air test		
188.3 ft.	D	/	Joint	Passed the air test		
190.8 ft.	D	/	Crack	Is Now Sealed		1 GALLON
193.2 ft.	D	/	Joint	Passed the air test		
198.4 ft.	D	/	Joint	Passed the air test		
203.6 ft.	D	/	Joint	Passed the air test		
208.8 ft.	D	/	Joint	Passed the air test		
214.0 ft.	D	/	Joint	Passed the air test		
219.2 ft.	D	/	Joint	Passed the air test		
224.2 ft.	D	/	Joint	Passed the air test		
229.6 ft.	D	/	Joint	Passed the air test		
234.5 ft.	D	/	Joint	Passed the air test		
239.6 ft.	D	/	Joint	Passed the air test		
244.7 ft.	D	/	Joint	Passed the air test		
250.3 ft.	D	/	Joint	Passed the air test		
255.0 ft.	D	/	Joint	Passed the air test		
259.9 ft.	D	/	Joint	Passed the air test		
265.1 ft.	D	/	Joint	Passed the air test		
270.2 ft.	D	/	Joint	Passed the air test		
275.2 ft.	D	/	Joint	Passed the air test		
280.3 ft.	D	/	Joint	Passed the air test		

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
285.6 ft.	D		/	Joint	Passed the air test		
290.9 ft.	D		/	Joint	Passed the air test		
295.9 ft.	D		/	Joint	Passed the air test		
301.0 ft.	D		/	Joint	Passed the air test		
306.0 ft.	D		/	Joint	Passed the air test		
311.1 ft.	D		/	Joint	Passed the air test		
316.2 ft.	D		/	Joint	Passed the air test		
321.3 ft.	D		/	Joint	Passed the air test		
326.4 ft.	D		/	Joint	Passed the air test		
331.5 ft.	D		/	Joint	Passed the air test		
336.9 ft.	D		/	Joint	Passed the air test		
342.1 ft.	D		/	Crack Joint	Is Now Sealed		1 GALLON
346.9 ft.	D		/	Joint	Passed the air test		
352.2 ft.	D		/	Joint	Passed the air test		
357.3 ft.	D		/	Joint	Passed the air test		
362.4 ft.	D		/	Joint	Passed the air test		
367.7 ft.	D		/	Joint	Passed the air test		
372.5 ft.	D		/	Joint	Passed the air test		
377.7 ft.	D		/	Joint	Passed the air test		
382.9 ft.	D		/	Joint	Passed the air test		
388.1 ft.	D		/	Joint	Passed the air test		
388.1 ft.	D		/	Inspection			

Inspection's photos

Main Inspections Small Photos

Mainline ID:	City:	Address:	Project name:
RUMSON OSPREY LN 88 TO 87	RUMSON NJ	OSPREY LN	8/5/21 RUMSON OSPREY LN GROUTING
Start date/time:	Asset length:	Weather:	Operator:
8/6/2021 2:21 PM	407.0 ft.	Dry	John Read
Upstream node:	Depth US:	Downstream node:	Depth DS:
88		87	
Pipe shape:	Pipe material:	Pipe height:	Pipe width:
Circular	Clay ESVP	8.0 in.	
Comments:			

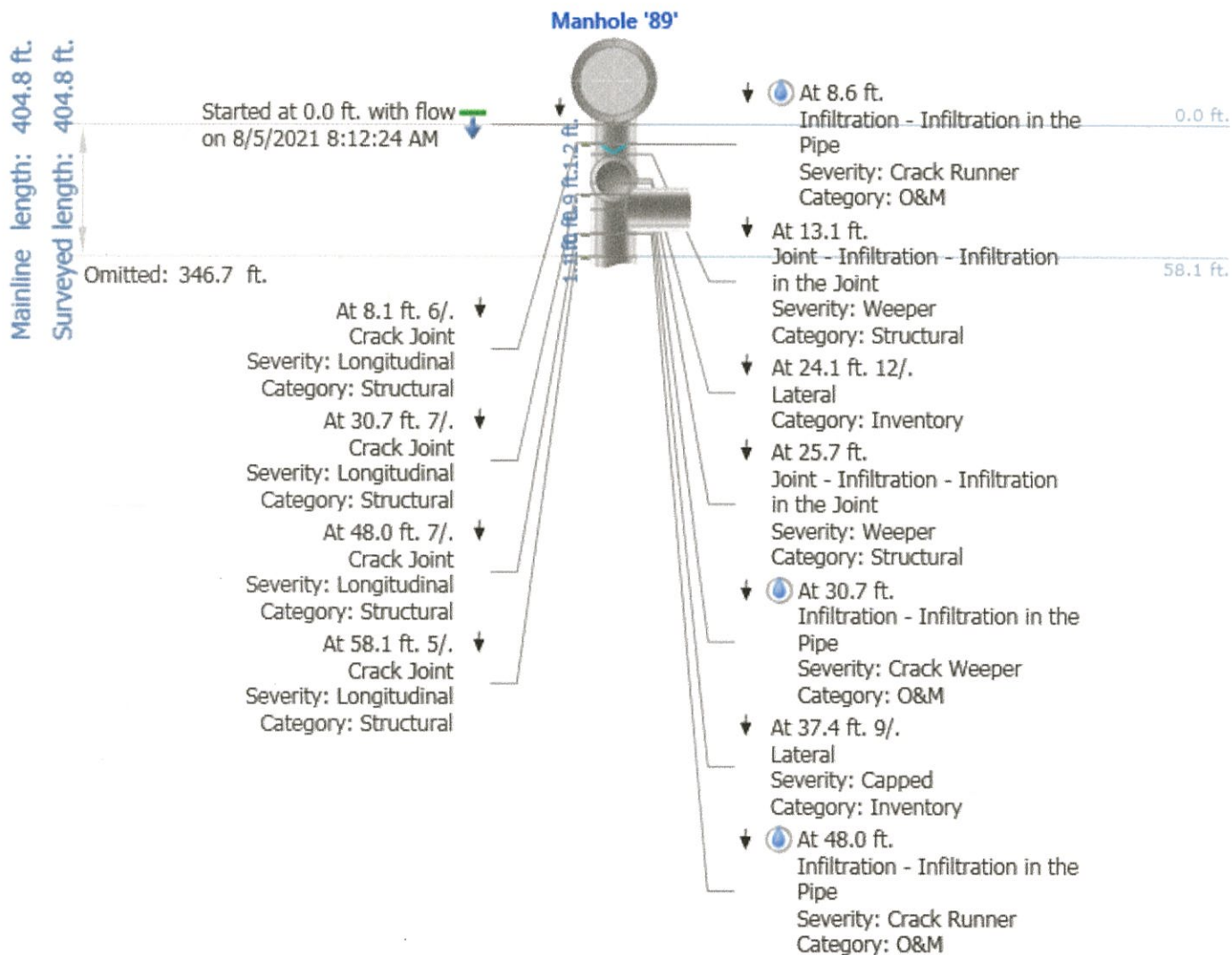
Observations

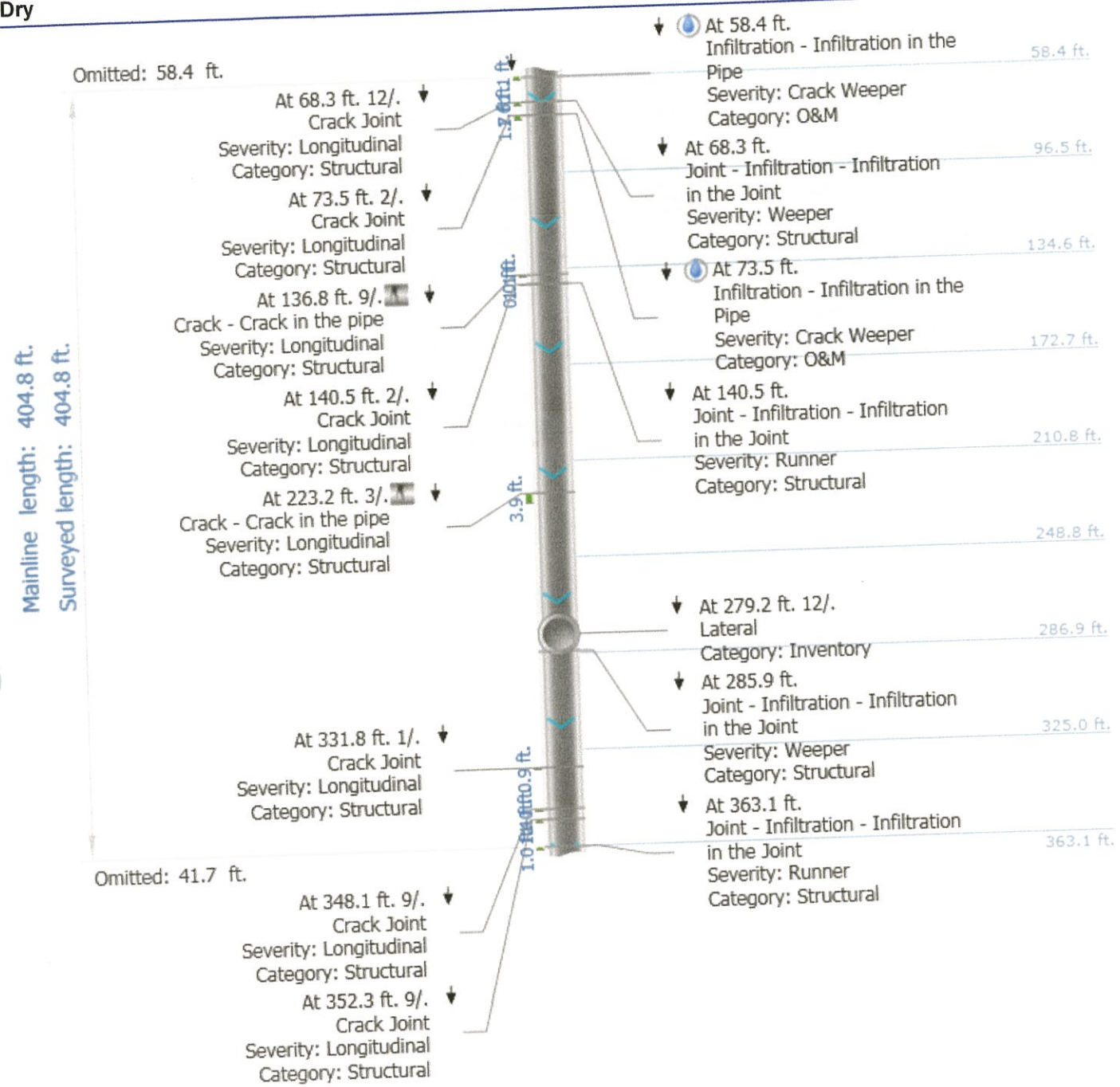
Distance	Dir. Length	From/To	Code	Modifier/Severity	Rating	Comments
388.0 ft.	D	/	Inspection.			
393.3 ft.	D	/	Joint	Passed the air test		
397.9 ft.	D	/	Joint	Passed the air test		
403.8 ft.	D	/	Inspection	End		
403.8 ft.	D	/	Joint	Is Gapped		1 GALLON

Inspection's photos

Main Inspections Pipe Run

Project name:	Mainline ID:	City:	Address:
8/5/21 RUMSON OSPREY LN	RUMSON OSPREY LN 89 TO 88	RUMSON NJ	OSPREY LN
Start date/time:	Direction:	Weather:	Surface condition:
8/5/2021 8:12 AM	With the flow	Dry	Asphalt
Pipe shape:	Pipe material:	Pipe height:	Pipe width:
Circular	Clay ESVP	8.0 in.	





Project name:
**8/5/21 RUMSON OSPREY
LN GROUTING**

Mainline ID:
**RUMSON OSPREY LN 89
TO 88**

Start date/time:
8/6/2021 7:49 AM

Direction:
With the flow

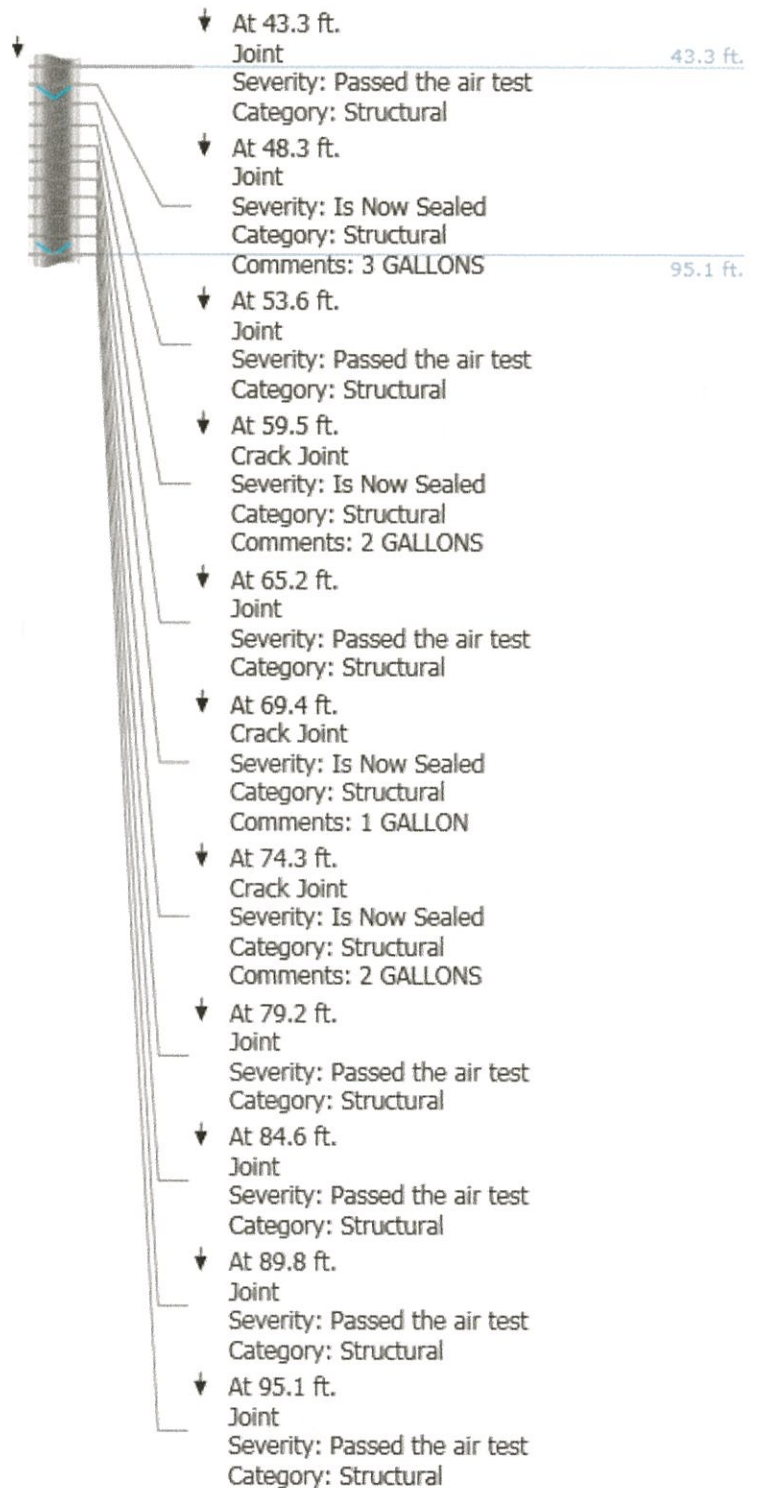
Weather:

Dry

Mainline length: 404.8 ft.
Surveyed length: 399.8 ft.

Omitted: 43.3 ft.

Omitted: 309.7 ft.



Project name:
**8/5/21 RUMSON OSPREY
LN GROUTING**

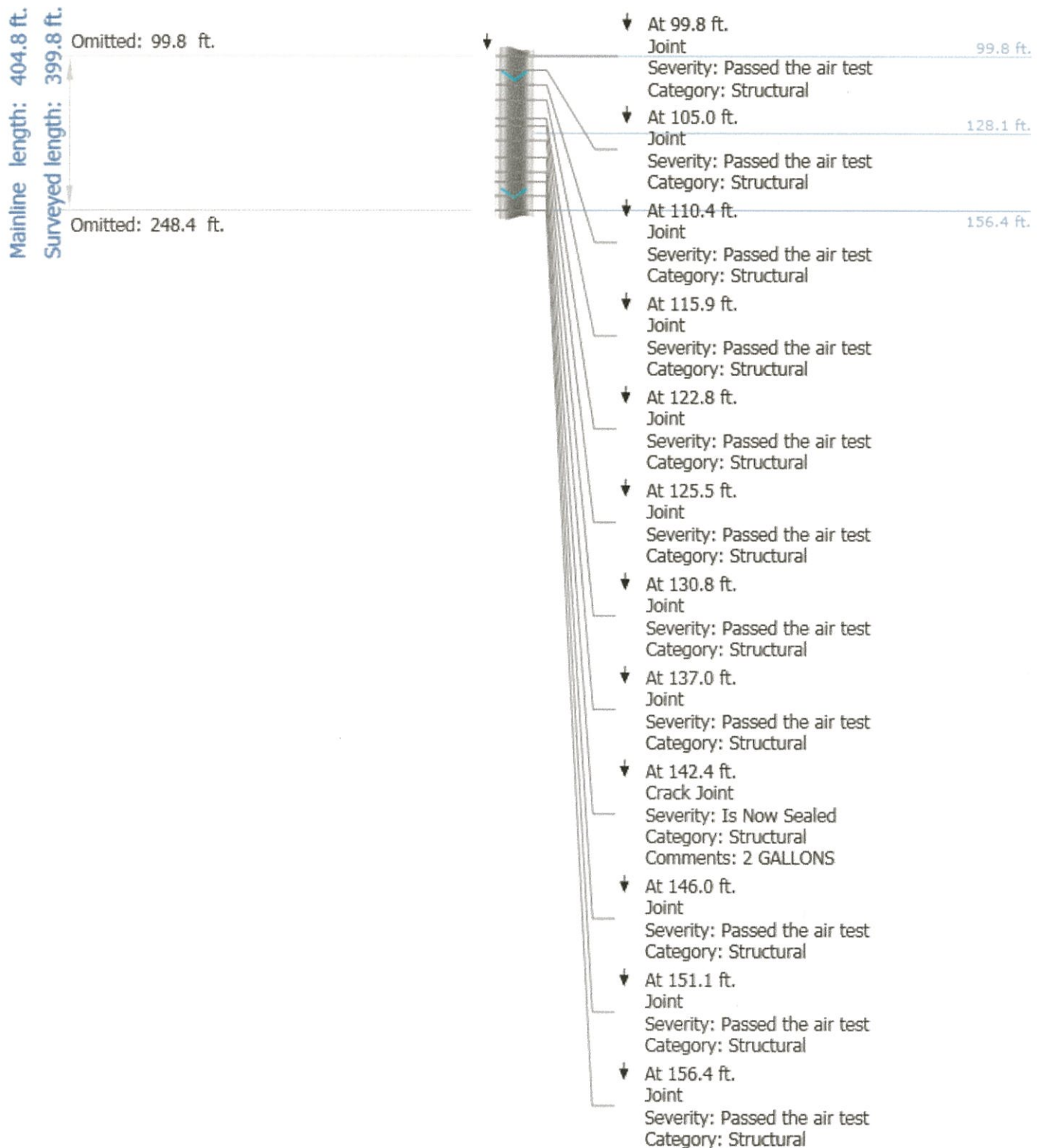
Mainline ID:
**RUMSON OSPREY LN 89
TO 88**

Start date/time:
8/6/2021 7:49 AM

Direction:
With the flow

Weather:

Dry



Project name:
**8/5/21 RUMSON OSPREY
LN GROUTING**

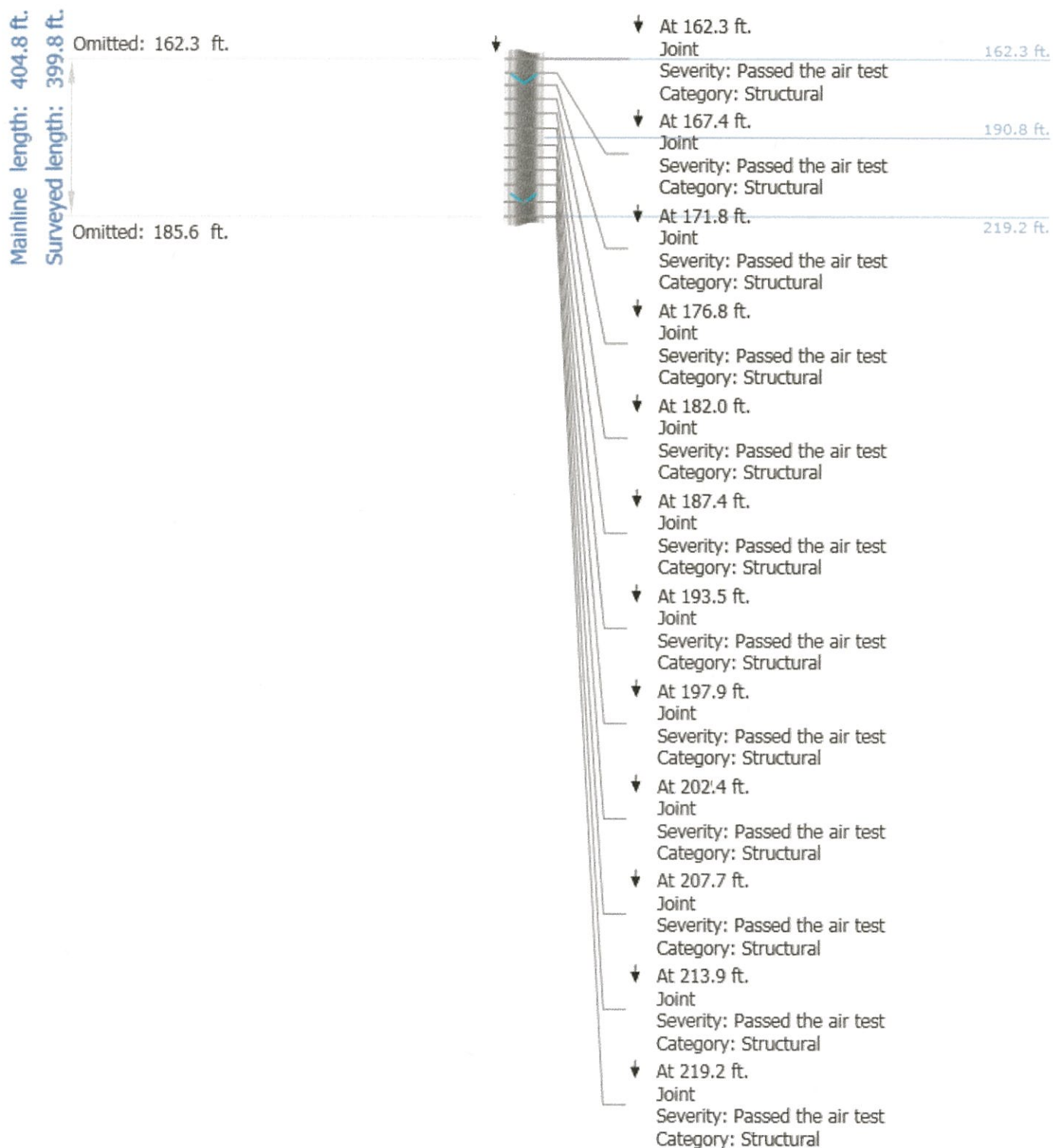
Mainline ID:
**RUMSON OSPREY LN 89
TO 88**

Start date/time:
8/6/2021 7:49 AM

Direction:
With the flow

Weather:

Dry



Project name:
**8/5/21 RUMSON OSPREY
LN GROUTING**

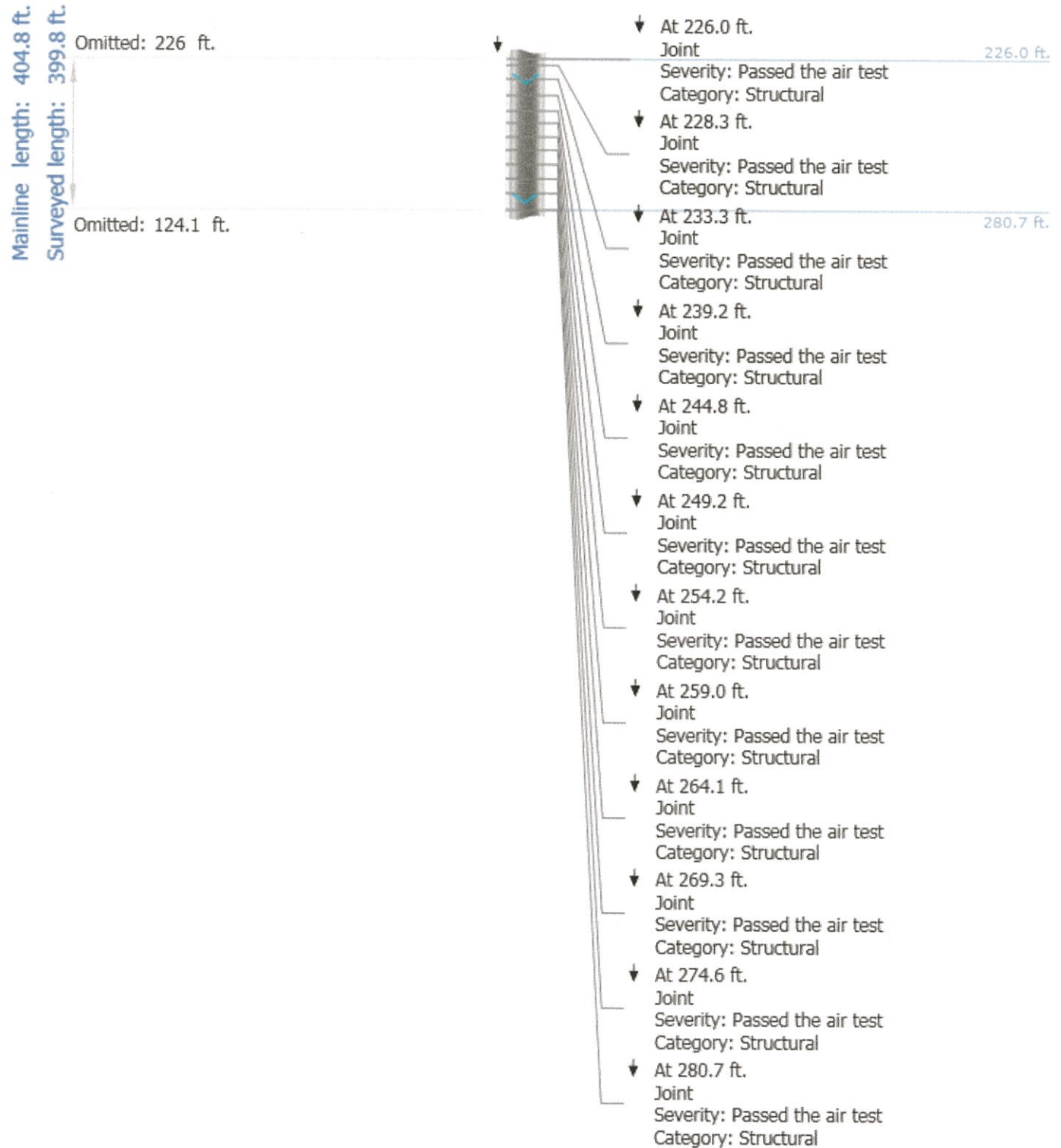
Mainline ID:
**RUMSON OSPREY LN 89
TO 88**

Start date/time:
8/6/2021 7:49 AM

Direction:
With the flow

Weather:

Dry



Project name:
**8/5/21 RUMSON OSPREY
LN GROUTING**

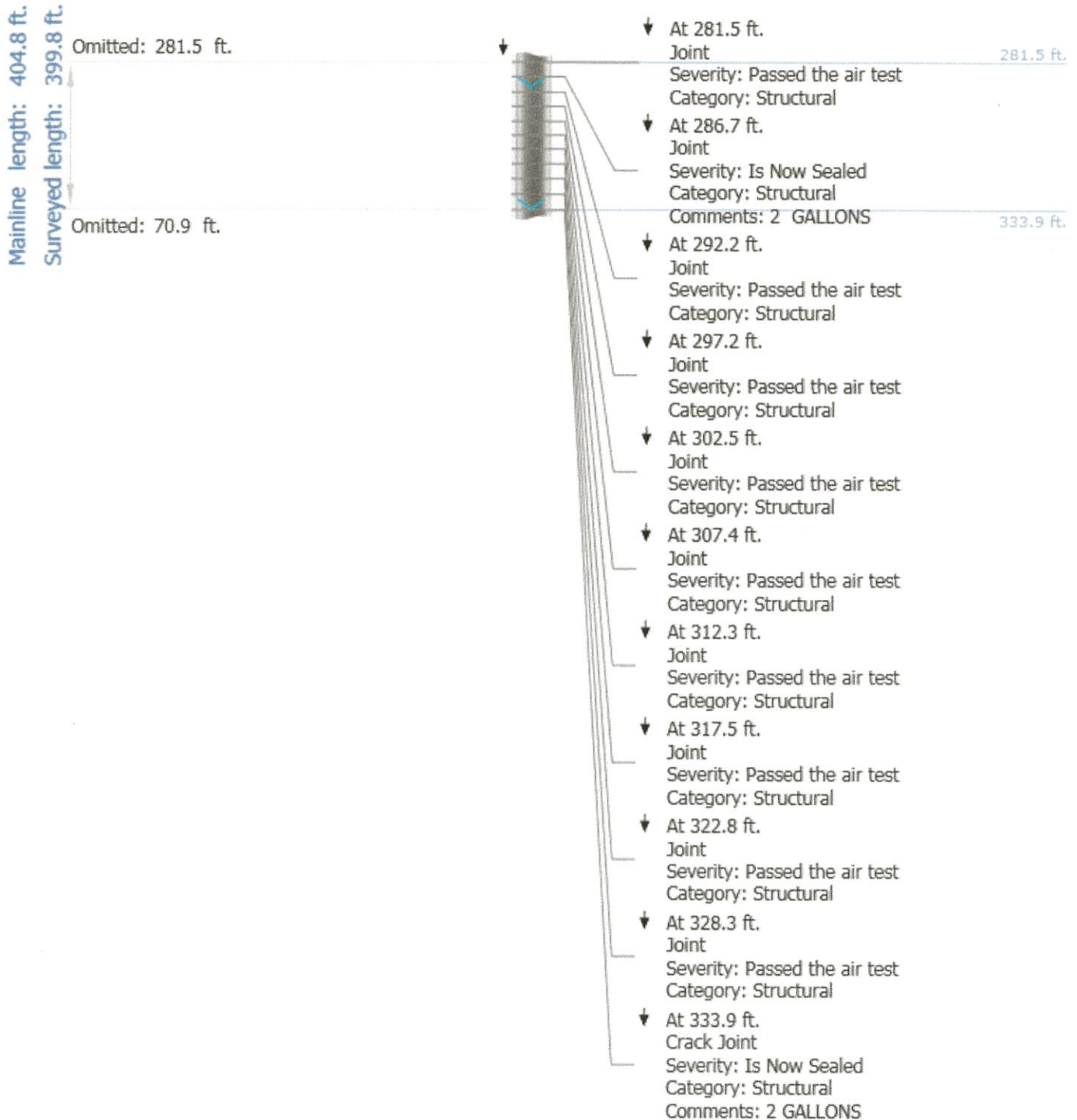
Mainline ID:
**RUMSON OSPREY LN 89
TO 88**

Start date/time:
8/6/2021 7:49 AM

Direction:
With the flow

Weather:

Dry



Project name:
**8/5/21 RUMSON OSPREY
LN GROUTING**

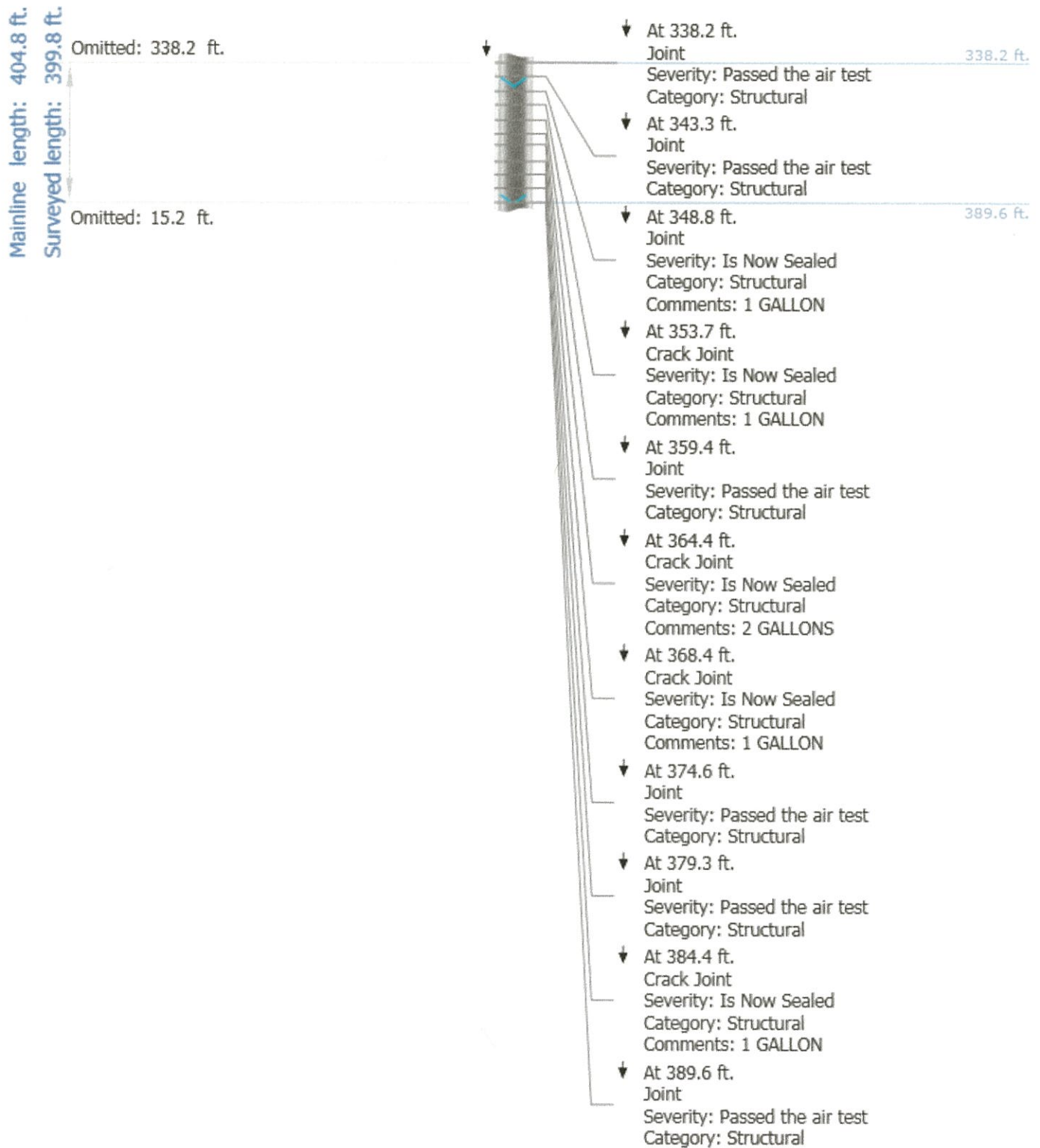
Mainline ID:
**RUMSON OSPREY LN 89
TO 88**

Start date/time:
8/6/2021 7:49 AM

Direction:
With the flow

Weather:

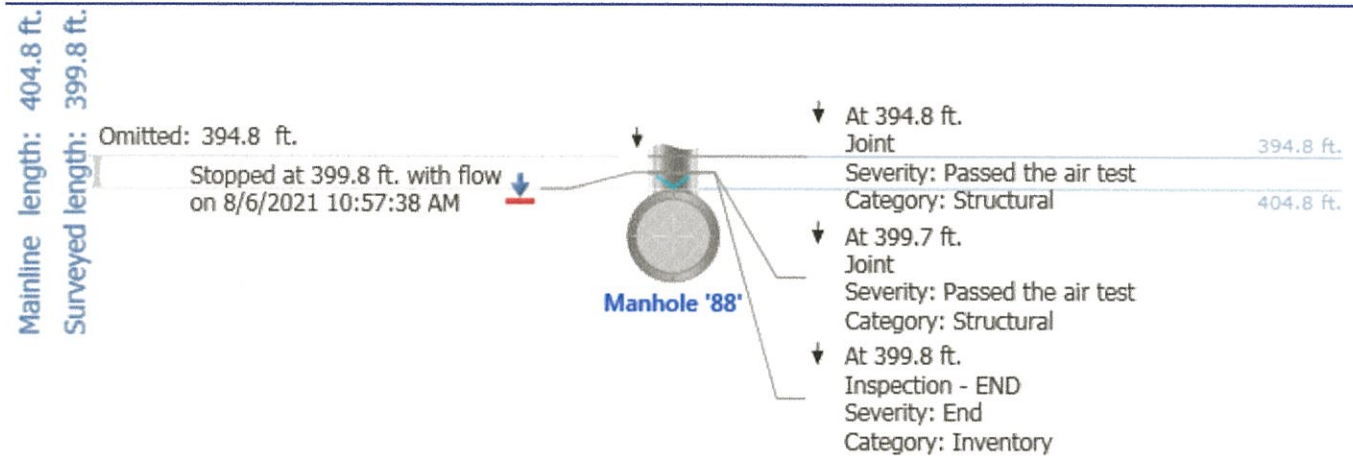
Dry



Project name:	Mainline ID:	Start date/time:	Direction:
8/5/21 RUMSON OSPREY LN GROUTING	RUMSON OSPREY LN 89 TO 88	8/6/2021 7:49 AM	With the flow

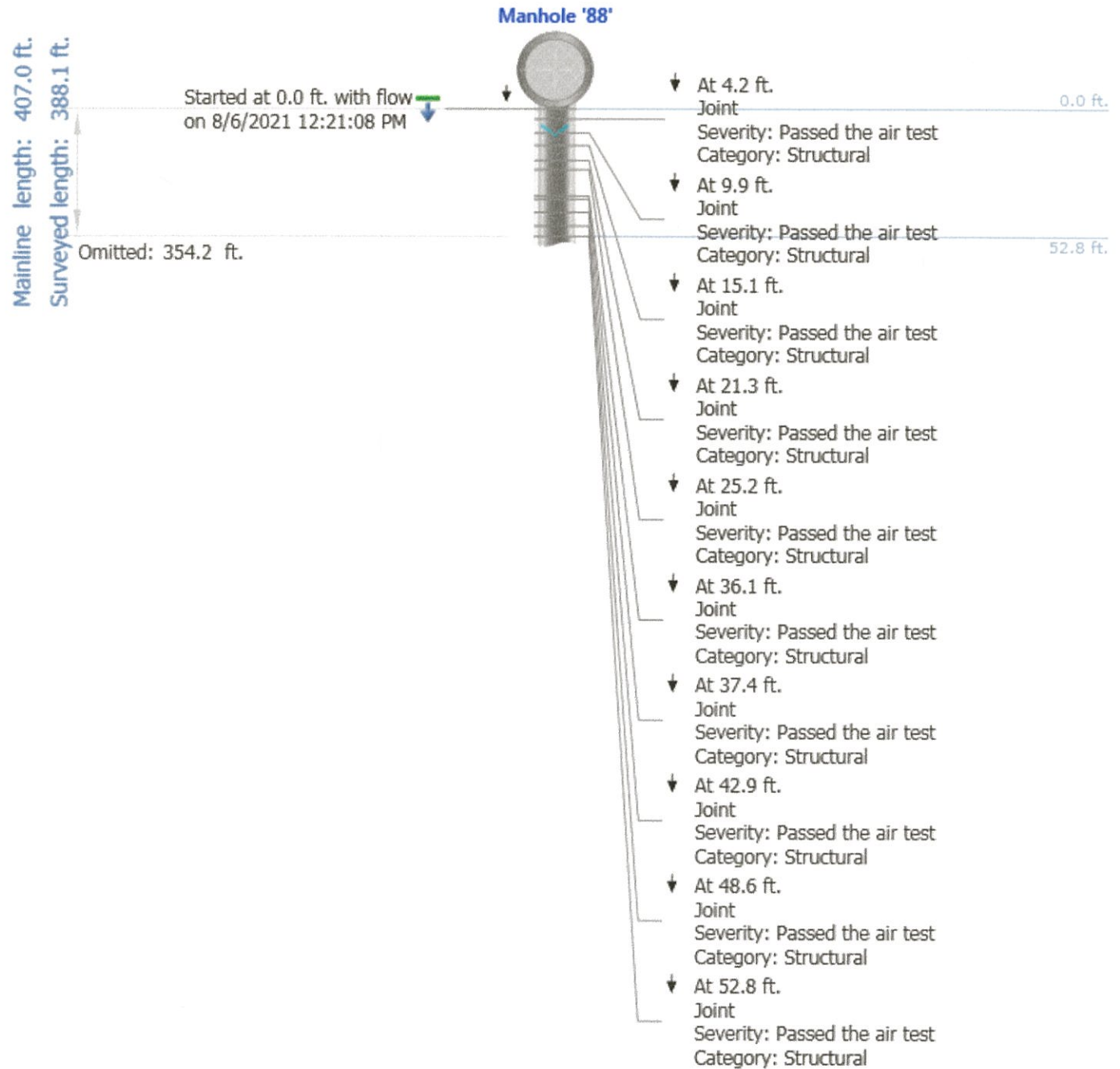
Weather:

Dry



Main Inspections Pipe Run

Project name:	Mainline ID:	City:	Address:
8/5/21 RUMSON OSPREY LN GROUTING	RUMSON OSPREY LN 88 TO 87	RUMSON NJ	OSPREY LN
Start date/time:	Direction:	Weather:	Surface condition:
8/6/2021 12:21 PM	With the flow	Dry	Asphalt
Pipe shape:	Pipe material:	Pipe height:	Pipe width:
Circular	Clay ESVP	8.0 in.	



Project name:
**8/5/21 RUMSON OSPREY
LN GROUTING**

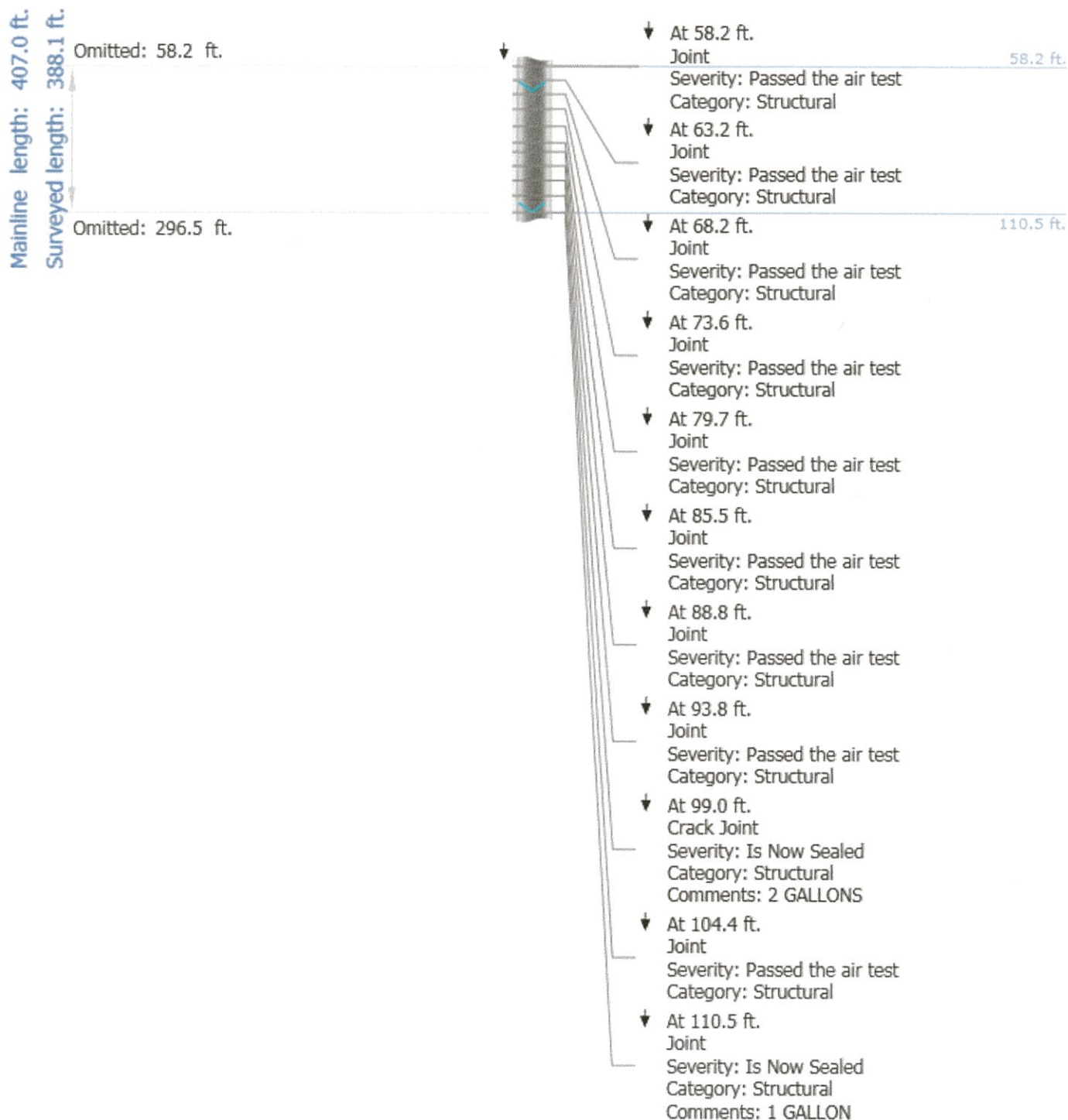
Mainline ID:
**RUMSON OSPREY LN 88
TO 87**

Start date/time:
8/6/2021 12:21 PM

Direction:
With the flow

Weather:

Dry



Project name:
**8/5/21 RUMSON OSPREY
LN GROUTING**

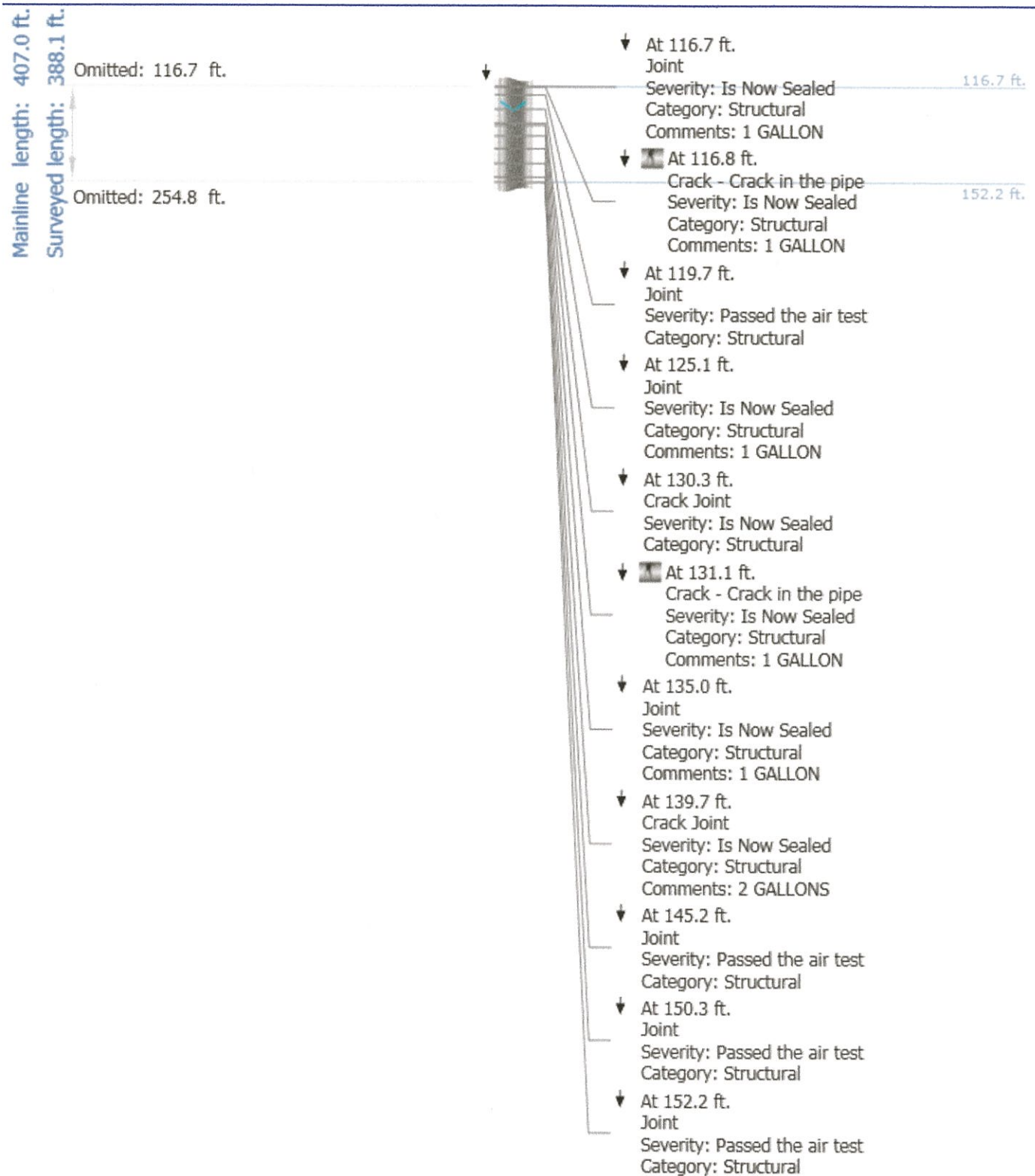
Mainline ID:
**RUMSON OSPREY LN 88
TO 87**

Start date/time:
8/6/2021 12:21 PM

Direction:
With the flow

Weather:

Dry



Project name:
**8/5/21 RUMSON OSPREY
LN GROUTING**

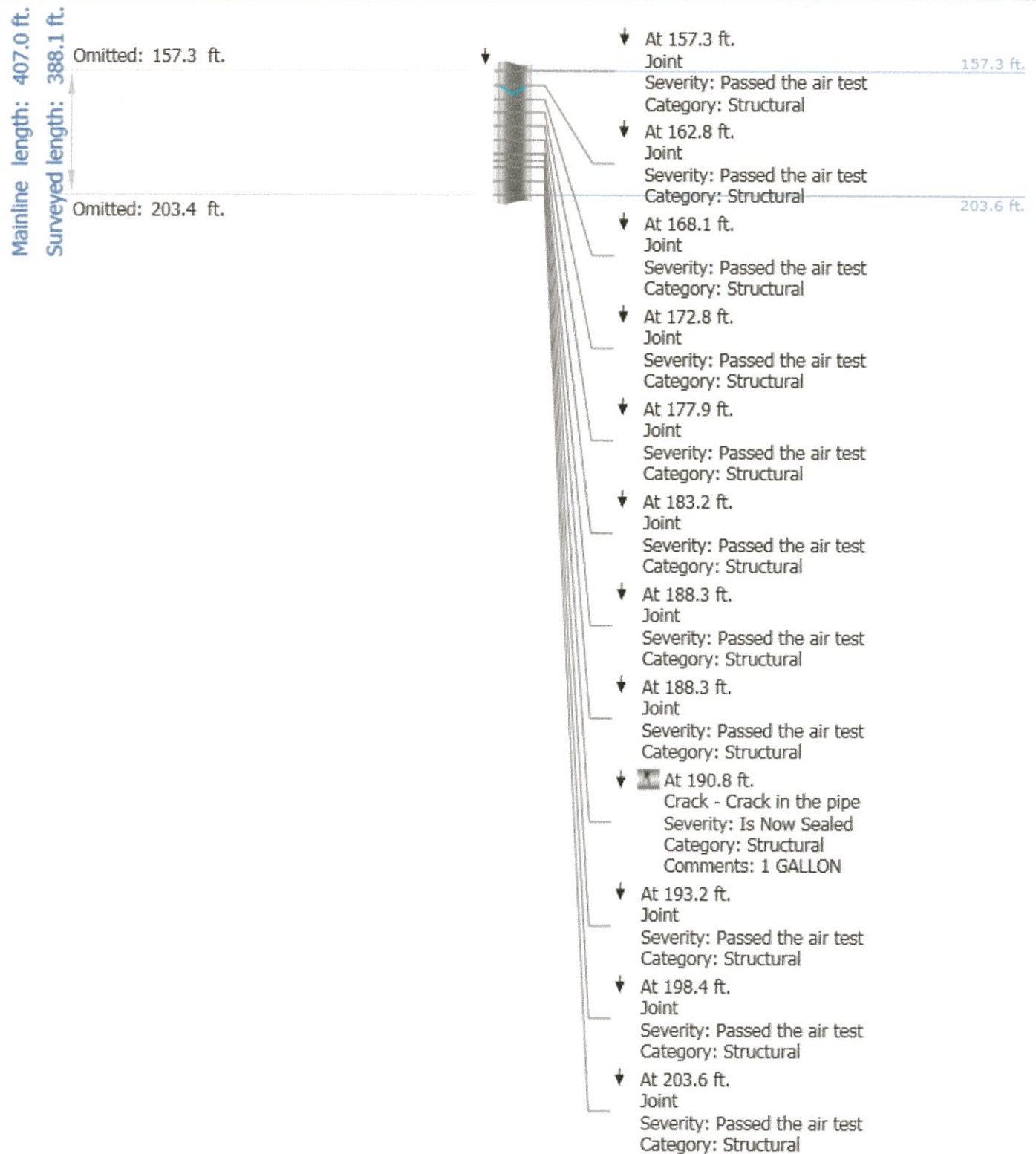
Mainline ID:
**RUMSON OSPREY LN 88
TO 87**

Start date/time:
8/6/2021 12:21 PM

Direction:
With the flow

Weather:

Dry



Project name:
**8/5/21 RUMSON OSPREY
LN GROUTING**

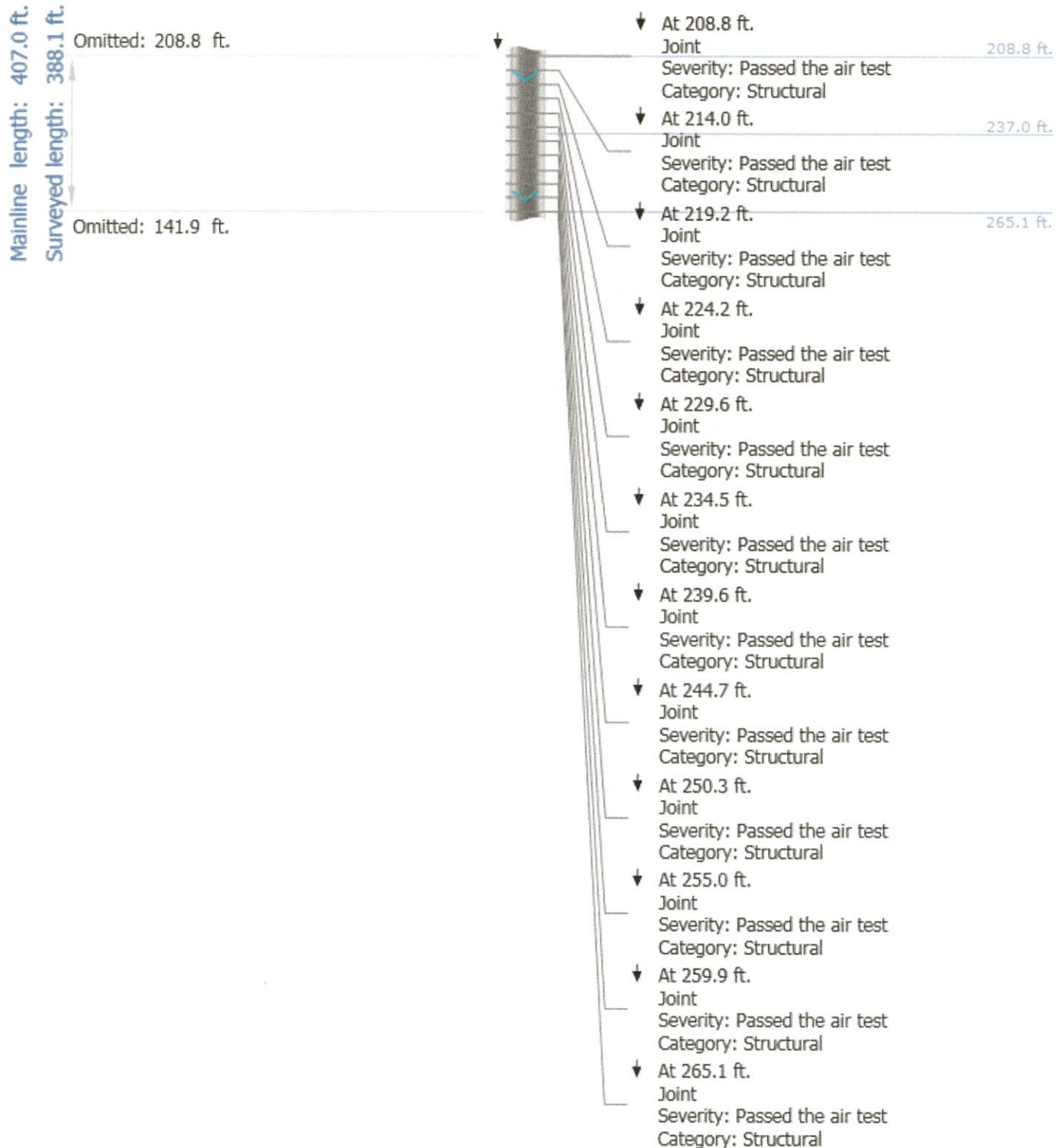
Mainline ID:
**RUMSON OSPREY LN 88
TO 87**

Start date/time:
8/6/2021 12:21 PM

Direction:
With the flow

Weather:

Dry



Project name:
**8/5/21 RUMSON OSPREY
LN GROUTING**

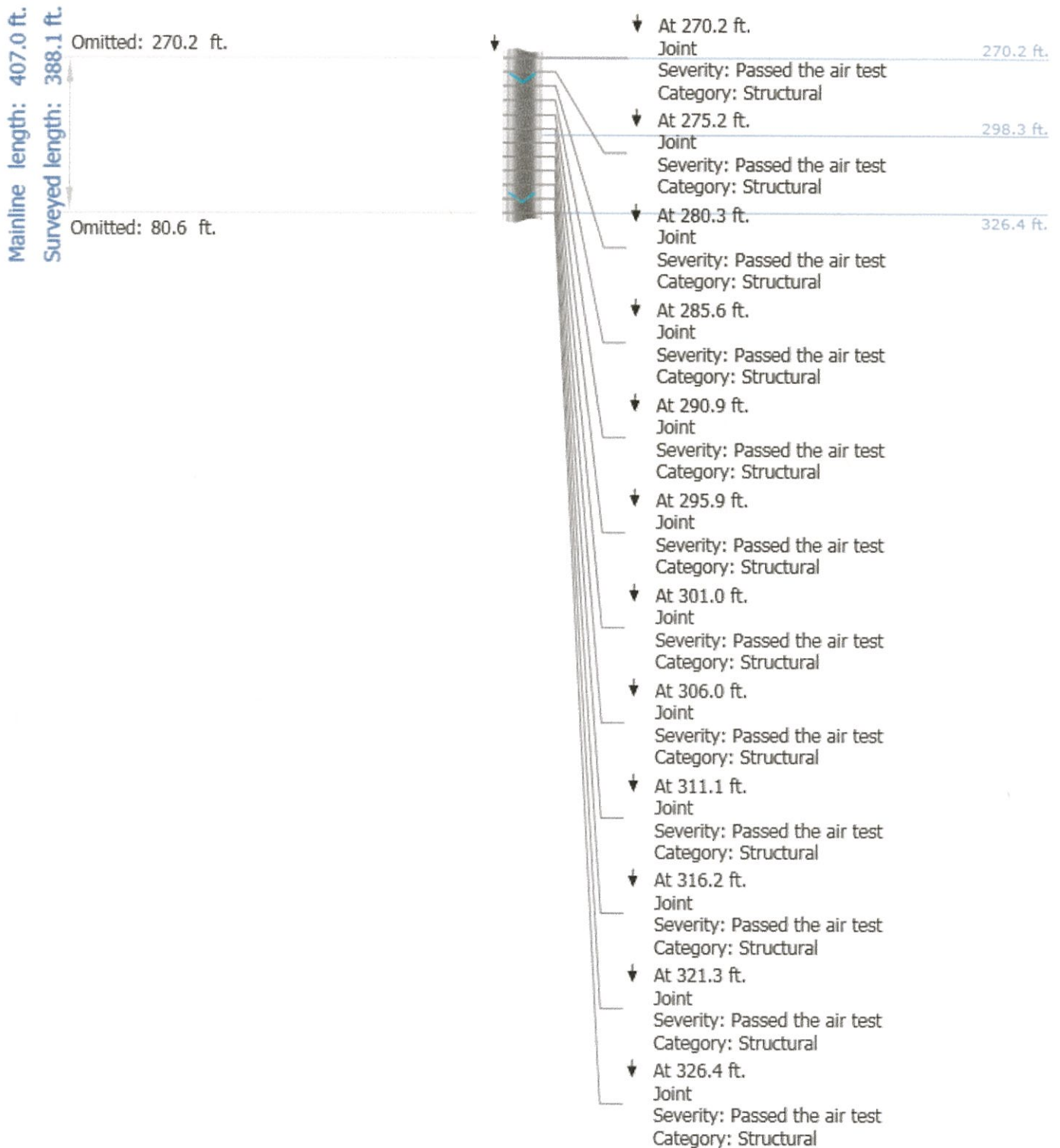
Mainline ID:
**RUMSON OSPREY LN 88
TO 87**

Start date/time:
8/6/2021 12:21 PM

Direction:
With the flow

Weather:

Dry



Project name:
**8/5/21 RUMSON OSPREY
LN GROUTING**

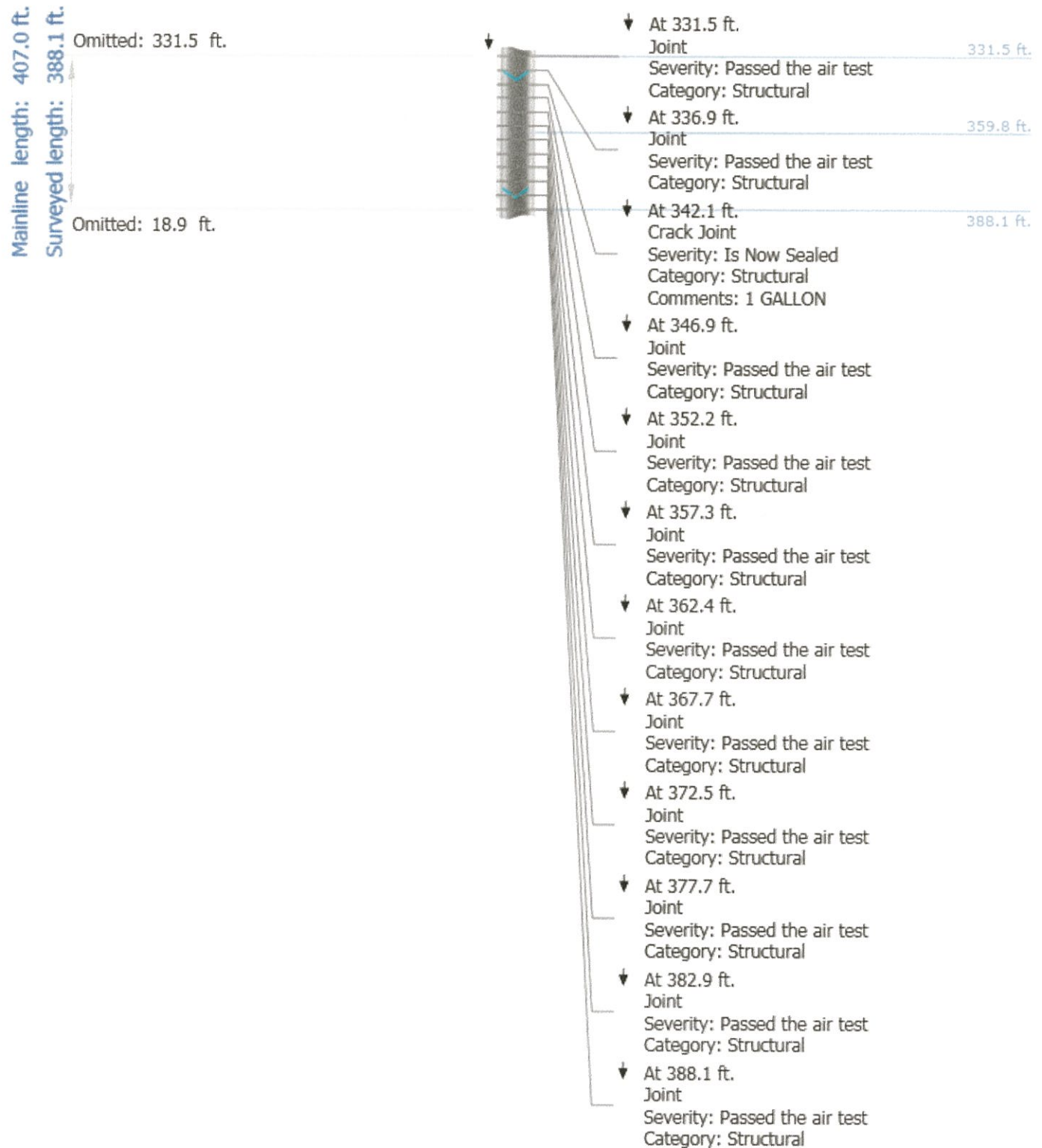
Mainline ID:
**RUMSON OSPREY LN 88
TO 87**

Start date/time:
8/6/2021 12:21 PM

Direction:
With the flow

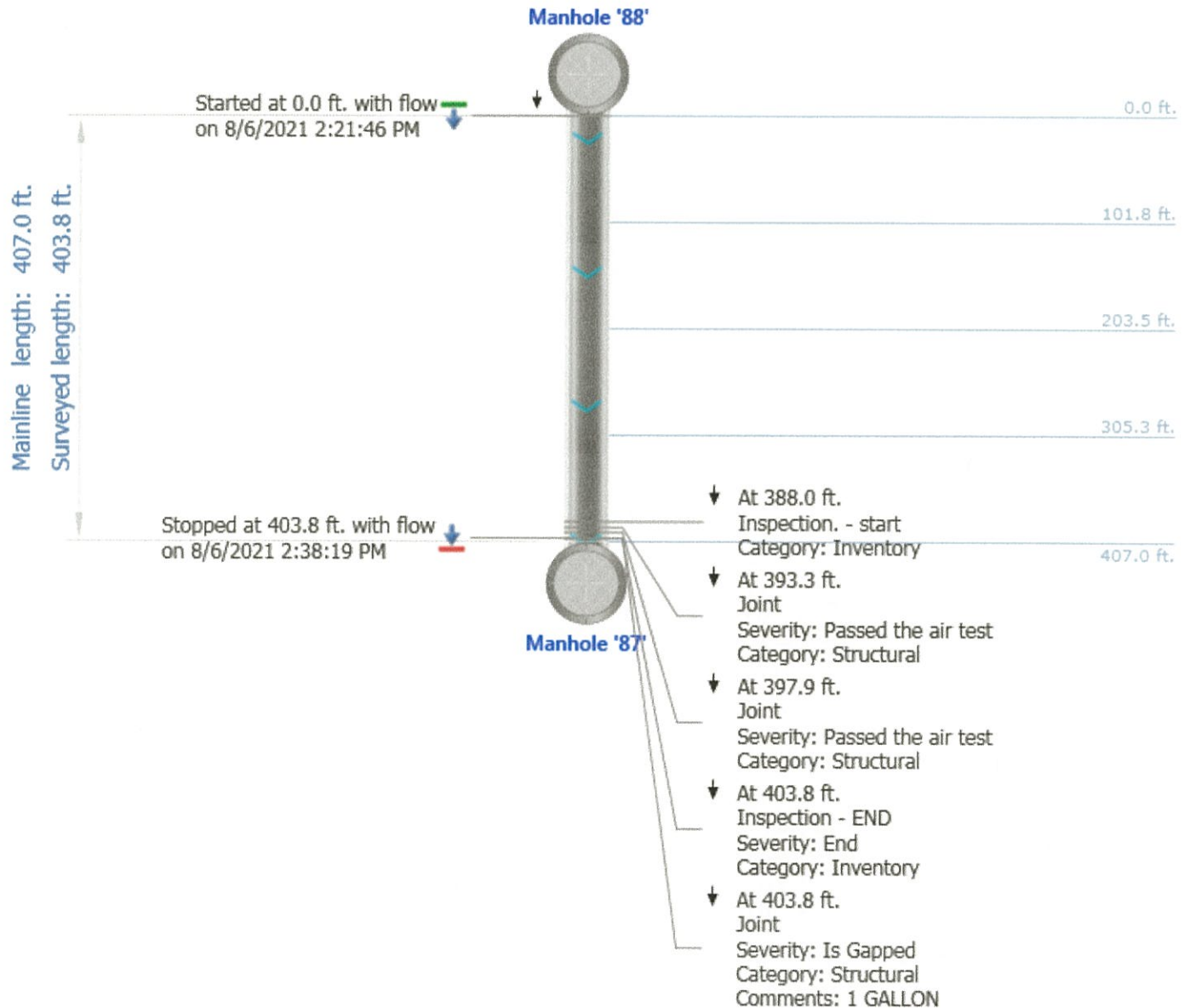
Weather:

Dry



Main Inspections Pipe Run

Project name: 8/5/21 RUMSON OSPREY LN GROUTING	Mainline ID: RUMSON OSPREY LN 88 TO 87	City: RUMSON NJ	Address: OSPREY LN
Start date/time: 8/6/2021 2:21 PM	Direction: With the flow	Weather: Dry	Surface condition: Asphalt
Pipe shape: Circular	Pipe material: Clay ESVP	Pipe height: 8.0 in.	Pipe width:



Oswald ENTERPRISES, INC.

YELLOW BROOK PROPERTY COMPANY
247 BRIDGE AVENUE
RED BANK, NEW JERSEY 07701

DVD 2
T.V. INSPECTION AND CHEMICAL GROUTING
OF VARIOUS SANITARY SEWER LINES
OSPREY LANE, RUMSON

AUGUST 9 AND 10, 2021

OSWALD ENTERPRISES, INC.
161 EAST ROAD - P.O. BOX 126
BELFORD, NEW JERSEY 07718

Main Office: 161 East Road, P.O. Box 126, Belford, New Jersey 07718
Phone: 732-787-1436 • Fax: 732-495-4990
www.OswaldEnt.com

Main Inspections Small Photos

Mainline ID: RUMSON OSPREY LN 87 TO 85	City: RUMSON NJ	Address: OSPREY LN	Project name: 8/9/21 RUMSON OSPREY LN GROUTING DVD 2
Start date/time: 8/9/2021 7:31 AM	Asset length: 396.3 ft.	Weather: Dry	Operator: John Read
Upstream node: 87	Depth US:	Downstream node: 85	Depth DS:
Pipe shape: Circular	Pipe material: Clay ESVP	Pipe height: 8.0 in.	Pipe width:
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
5.6 ft.	D		/	Joint	Passed the air test		
11.4 ft.	D		/	Joint	Passed the air test		
15.1 ft.	D		/	Joint	Passed the air test		
20.7 ft.	D		/	Joint	Passed the air test		
27.3 ft.	D		/	Joint	Passed the air test		
30.7 ft.	D		/	Joint	Passed the air test		
35.4 ft.	D		/	Joint	Passed the air test		
40.8 ft.	D		/	Joint	Passed the air test		
46.7 ft.	D		/	Joint	Passed the air test		
52.8 ft.	D		/	Joint	Passed the air test		
56.0 ft.	D		/	Joint	Passed the air test		
60.8 ft.	D		/	Joint	Passed the air test		

Observations

Distance	Dir. Length	From/To	Code	Modifier/Severity	Rating	Comments
66.1 ft.	D	/	Joint	Is Now Sealed		1 GALLON
71.6 ft.	D	/	Joint	Passed the air test		
77.9 ft.	D	/	Joint	Passed the air test		
83.8 ft.	D	/	Joint	Passed the air test		
86.3 ft.	D	/	Joint	Passed the air test		
91.8 ft.	D	/	Joint	Passed the air test		
97.5 ft.	D	/	Joint	Passed the air test		
103.8 ft.	D	/	Joint	Passed the air test		
109.5 ft.	D	/	Joint	Passed the air test		
109.5 ft.	D	/	Joint	Passed the air test		
116.5 ft.	D	/	Joint	Passed the air test		
119.5 ft.	D	/	Joint	Passed the air test		
124.2 ft.	D	/	Joint	Passed the air test		
130.1 ft.	D	/	Joint	Passed the air test		
136.3 ft.	D	/	Joint	Passed the air test		
141.1 ft.	D	/	Joint	Passed the air test		
144.8 ft.	D	/	Joint	Passed the air test		
149.9 ft.	D	/	Joint	Passed the air test		
155.9 ft.	D	/	Joint	Passed the air test		
161.2 ft.	D	/	Joint	Passed the air test		
165.3 ft.	D	/	Joint	Is Now Sealed		2 GALLONS
170.3 ft.	D	/	Joint	Passed the air test		

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
175.7 ft.	D		/	Joint	Passed the air test		
181.7 ft.	D		/	Joint	Passed the air test		
187.4 ft.	D		/	Joint	Passed the air test		
190.9 ft.	D		/	Joint	Passed the air test		
196.0 ft.	D		/	Joint	Passed the air test		
201.6 ft.	D		/	Joint	Passed the air test		
207.7 ft.	D		/	Joint	Passed the air test		
213.9 ft.	D		/	Joint	Passed the air test		
216.7 ft.	D		/	Joint	Passed the air test		
221.6 ft.	D		/	Joint	Passed the air test		
227.0 ft.	D		/	Joint	Passed the air test		
233.0 ft.	D		/	Joint	Passed the air test		
239.1 ft.	D		/	Joint	Is Now Sealed		1 GALLON
244.6 ft.	D		/	Joint	Is Now Sealed		1 GALLON
247.6 ft.	D		/	Joint	Passed the air test		
252.7 ft.	D		/	Joint	Passed the air test		
257.9 ft.	D		/	Joint	Passed the air test		
263.6 ft.	D		/	Joint	Passed the air test		
269.0 ft.	D		/	Joint	Passed the air test		
274.7 ft.	D		/	Joint	Passed the air test		
280.1 ft.	D		/	Joint	Passed the air test		
285.8 ft.	D		/	Joint	Passed the air test		

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
289.9 ft.	D		/	Joint	Passed the air test		
293.9 ft.	D		/	Joint	Passed the air test		
299.0 ft.	D		/	Joint	Passed the air test		
304.4 ft.	D		/	Joint	Passed the air test		
309.9 ft.	D		/	Joint	Passed the air test		
315.6 ft.	D		/	Joint	Passed the air test		
320.7 ft.	D		/	Joint	Passed the air test		
324.7 ft.	D		/	Joint	Passed the air test		
329.8 ft.	D		/	Joint	Passed the air test		
333.9 ft.	D		/	Joint	Passed the air test		
335.2 ft.	D		/	Joint	Passed the air test		
340.5 ft.	D		/	Joint	Passed the air test		
346.3 ft.	D		/	Joint	Passed the air test		
352.1 ft.	D		/	Joint	Passed the air test		
355.9 ft.	D		/	Joint	Passed the air test		
360.7 ft.	D		/	Joint	Passed the air test		
365.7 ft.	D		/	Joint	Passed the air test		
371.1 ft.	D		/	Joint	Passed the air test		
376.3 ft.	D		/	Joint	Passed the air test		
381.6 ft.	D		/	Joint	Passed the air test		
387.1 ft.	D		/	Joint	Passed the air test		
391.5 ft.	D		/	Joint	Passed the air test		

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
391.5 ft.	D		/	Inspection	End		

Inspection's photos

Main Inspections Small Photos

Mainline ID: RUMSON SHREWSBURY DR 85 TO 84	City: RUMSON NJ	Address: SHREWSBURY DR	Project name: 8/9/21 RUMSON OSPREY LN DVD 2
Start date/time: 8/9/2021 10:36 AM	Asset length: 44.3 ft.	Weather: Dry	Operator: John Read
Upstream node: 85	Depth US:	Downstream node: 84	Depth DS:
Pipe shape: Circular	Pipe material: Clay ESVP	Pipe height: 12.0 in.	Pipe width:
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
10.1 ft.	D		/	Joint	Other		
40.6 ft.	D		/	Joint	Other		
44.3 ft.	D		/	Inspection	End		

Inspection's photos

Main Inspections Small Photos

Mainline ID: RUMSON SHREWSBURY DR 84 TO 83	City: RUMSON NJ	Address: SHREWSBURY DR	Project name: 8/9/21 RUMSON OSPREY LN DVD 2
Start date/time: 8/9/2021 10:51 AM	Asset length: 328.0 ft.	Weather: Dry	Operator: John Read
Upstream node: 84	Depth US:	Downstream node: 83	Depth DS:
Pipe shape: Circular	Pipe material: Clay ESVP	Pipe height: 12.0 in.	Pipe width:
Comments:			

Observations


Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
6.7 ft.	D		/	Joint	Other		
240.4 ft.	D		12 /	Lateral			
321.0 ft.	D		/	Joint	Other		
328.0 ft.	D		/	Inspection	End		

Inspection's photos

Main Inspections Small Photos

Mainline ID: RUMSON SHREWSBURY DR 83 TO 82	City: RUMSON NJ	Address: SHREWSBURY DR	Project name: 8/9/21 RUMSON OSPREY LN DVD 2
Start date/time: 8/9/2021 11:00 AM	Asset length: 371.4 ft.	Weather: Dry	Operator: John Read
Upstream node: 83	Depth US:	Downstream node: 82	Depth DS:
Pipe shape: Circular	Pipe material: Clay ESVP	Pipe height: 12.0 in.	Pipe width:
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
7.4 ft.	D		/	Joint	Other		
99.7 ft.	D		12 /	Lateral			
224.8 ft.	D		12 /	Lateral			
319.6 ft.	D		12 /	Lateral Defects	Mineral Deposit		
							
363.8 ft.	D		/	Joint	Other		
371.4 ft.	D		/	Inspection	End		

Inspection's photos

Main Inspections Small Photos

Mainline ID: RUMSON SHREWSBURY DR 82 TO 76	City: RUMSON NJ	Address: SHREWSBURY DR	Project name: 8/9/21 RUMSON OSPREY LN DVD 2
Start date/time: 8/9/2021 2:11 PM	Asset length: 381.6 ft.	Weather: Dry	Operator: John Read
Upstream node: 82	Depth US: 76	Downstream node: 76	Depth DS: 76
Pipe shape: Circular	Pipe material: Clay ESVP	Pipe height: 12.0 in.	Pipe width: 12.0 in.
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
5.5 ft.	D		/	Joint	Other		
85.2 ft.	D		12 /	Lateral			
154.1 ft.	D		/	Joint - Infiltration	Runner		
173.4 ft.	D		10 /	Lateral Defects	Mineral Deposit		



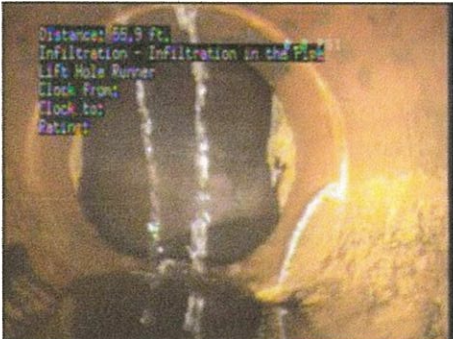
377.7 ft.	D		/	Joint	Other		
381.6 ft.	D		/	Inspection	End		

Inspection's photos

Main Inspections Small Photos

Mainline ID: RUMSON SHREWSBURY DR 76 TO PUMP STAT.	City: RUMSON NJ	Address: SHREWSBURY DR	Project name: 8/9/21 RUMSON OSPREY LN DVD 2
Start date/time: 8/9/2021 2:26 PM	Asset length: 57.5 ft.	Weather: Dry	Operator: John Read
Upstream node: 76	Depth US:	Downstream node: PUMP STAT.	Depth DS:
Pipe shape: Circular	Pipe material: Clay ESVP	Pipe height: 12.0 in.	Pipe width:
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
8.5 ft.	D		/	Joint	Other		
55.9 ft.	D		/	Fracture	Circular		
55.9 ft.	D		/	Infiltration	Crack Runner		
							
57.5 ft.	D		/	Inspection	End		

Inspection's photos

Main Inspections Small Photos

Mainline ID: RUMSON SHREWSBURY DR 85 TO 84	City: RUMSON NJ	Address: SHREWSBURY DR	Project name: 8/9/21 RUMSON OSPREY LN GROUTING DVD 2
Start date/time: 8/10/2021 8:23 AM	Asset length: 44.3 ft.	Weather: Dry	Operator: John Read
Upstream node: 85	Depth US: 	Downstream node: 84	Depth DS:
Pipe shape: Circular	Pipe material: Clay ESVP	Pipe height: 12.0 in.	Pipe width:
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
5.4 ft.	D		/	Joint	Passed the air test		
10.3 ft.	D		/	Joint	Passed the air test		
16.9 ft.	D		/	Joint	Passed the air test		
22.9 ft.	D		/	Joint	Passed the air test		
29.0 ft.	D		/	Joint	Passed the air test		
35.0 ft.	D		/	Joint	Passed the air test		
41.1 ft.	D		/	Joint	Passed the air test		
43.9 ft.	D		/	Inspection	End		

Inspection's photos

Main Inspections Small Photos

Mainline ID: RUMSON SHREWSBURY DR 84 TO 83	City: RUMSON NJ	Address: SHREWSBURY DR	Project name: 8/9/21 RUMSON OSPREY LN GROUTING DVD 2
Start date/time: 8/10/2021 8:49 AM	Asset length: 328.0 ft.	Weather: Dry	Operator: John Read
Upstream node: 84	Depth US: 	Downstream node: 83	Depth DS:
Pipe shape: Circular	Pipe material: Clay ESVP	Pipe height: 12.0 in.	Pipe width:
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
6.8 ft.	D		/	Joint	Passed the air test		
13.9 ft.	D		/	Joint	Passed the air test		
20.7 ft.	D		/	Joint	Passed the air test		
26.9 ft.	D		/	Joint	Passed the air test		
32.4 ft.	D		/	Joint	Passed the air test		
37.8 ft.	D		/	Joint	Passed the air test		
44.6 ft.	D		/	Joint	Passed the air test		
50.8 ft.	D		/	Joint	Passed the air test		
56.9 ft.	D		/	Joint	Passed the air test		
62.9 ft.	D		/	Joint	Passed the air test		
68.8 ft.	D		/	Joint	Passed the air test		
74.6 ft.	D		/	Joint	Passed the air test		
80.8 ft.	D		/	Joint	Passed the air test		
87.2 ft.	D		/	Joint	Passed the air test		
93.6 ft.	D		/	Joint	Passed the air test		

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
99.5 ft.	D		/	Joint	Passed the air test		
105.7 ft.	D		/	Joint	Passed the air test		
112.0 ft.	D		/	Joint	Passed the air test		
117.9 ft.	D		/	Joint	Passed the air test		
124.0 ft.	D		/	Joint	Passed the air test		
131.4 ft.	D		/	Joint	Passed the air test		
137.0 ft.	D		/	Joint	Passed the air test		
143.0 ft.	D		/	Joint	Passed the air test		
150.0 ft.	D		/	Joint	Passed the air test		
155.2 ft.	D		/	Joint	Passed the air test		
162.2 ft.	D		/	Joint	Passed the air test		
167.5 ft.	D		/	Joint	Passed the air test		
173.1 ft.	D		/	Joint	Passed the air test		
180.4 ft.	D		/	Joint	Passed the air test		
185.3 ft.	D		/	Joint	Passed the air test		
191.5 ft.	D		/	Joint	Passed the air test		
198.4 ft.	D		/	Joint	Passed the air test		
204.4 ft.	D		/	Joint	Passed the air test		
210.5 ft.	D		/	Joint	Passed the air test		
216.4 ft.	D		/	Joint	Passed the air test		
222.3 ft.	D		/	Joint	Passed the air test		
227.9 ft.	D		/	Joint	Passed the air test		

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
234.0 ft.	D		/	Joint	Passed the air test		
240.6 ft.	D		/	Joint	Passed the air test		
242.1 ft.	D		/	Joint	Passed the air test		
248.5 ft.	D		/	Joint	Passed the air test		
254.7 ft.	D		/	Joint	Passed the air test		
261.0 ft.	D		/	Joint	Passed the air test		
267.2 ft.	D		/	Joint	Passed the air test		
275.4 ft.	D		/	Joint	Passed the air test		
279.6 ft.	D		/	Joint	Passed the air test		
285.9 ft.	D		/	Joint	Passed the air test		
291.9 ft.	D		/	Joint	Passed the air test		
297.3 ft.	D		/	Inspection	End		
297.7 ft.	D		/	Joint	Passed the air test		

Inspection's photos

Main Inspections Small Photos

Mainline ID: RUMSON SHREWSBURY DR 84 TO 83	City: RUMSON NJ	Address: SHREWSBURY DR	Project name: 8/9/21 RUMSON OSPREY LN GROUTING DVD 2
Start date/time: 8/10/2021 11:36 AM	Asset length: 328.0 ft.	Weather: Dry	Operator: John Read
Upstream node: 84	Depth US:	Downstream node: 83	Depth DS:
Pipe shape: Circular	Pipe material: Clay ESVP	Pipe height: 12.0 in.	Pipe width:
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
297.7 ft.	D		/	Inspection.			
303.9 ft.	D		/	Joint	Passed the air test		
310.4 ft.	D		/	Joint	Passed the air test		
316.3 ft.	D		/	Joint	Passed the air test		
322.2 ft.	D		/	Joint	Passed the air test		
323.7 ft.	D		/	Inspection	End		

Inspection's photos

Main Inspections Small Photos

Mainline ID: RUMSON SHREWSBURY DR 82 TO 76	City: RUMSON NJ	Address: SHREWSBURY DR	Project name: 8/9/21 RUMSON OSPREY LN DVD 2
Start date/time: 8/10/2021 1:18 PM	Asset length: 381.6 ft.	Weather: Dry	Operator: John Read
Upstream node: 82	Depth US: 76	Downstream node: 76	Depth DS:
Pipe shape: Circular	Pipe material: Clay ESVP	Pipe height: 12.0 in.	Pipe width:
Comments:			

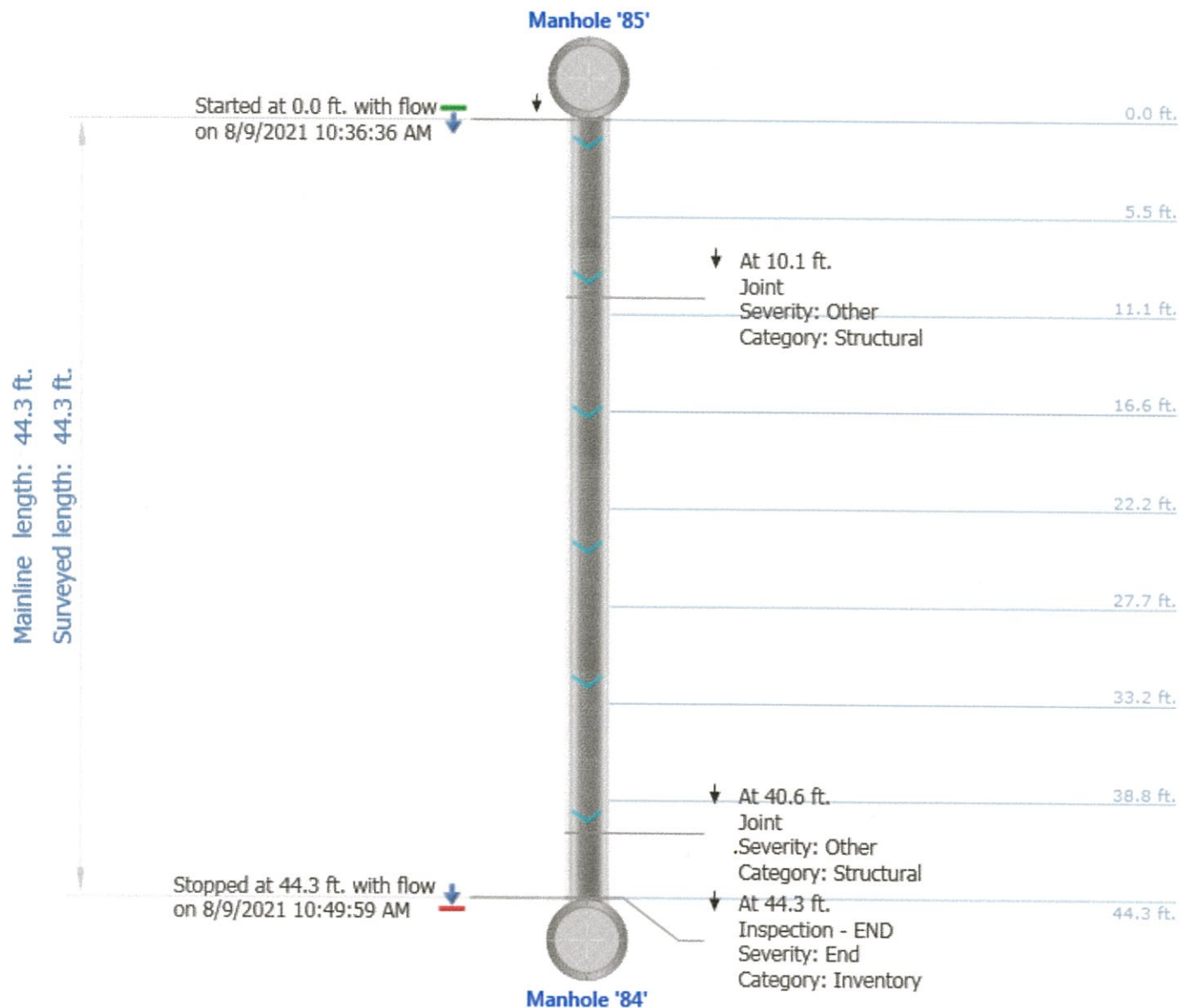
Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
153.6 ft.	D		/	Joint	Is Now Sealed		3 GALLONS
169.7 ft.	D		/	Inspection	End		
171.8 ft.	D		10 /	Lateral Defects	Is Now Sealed		3 GALLONS

Inspection's photos

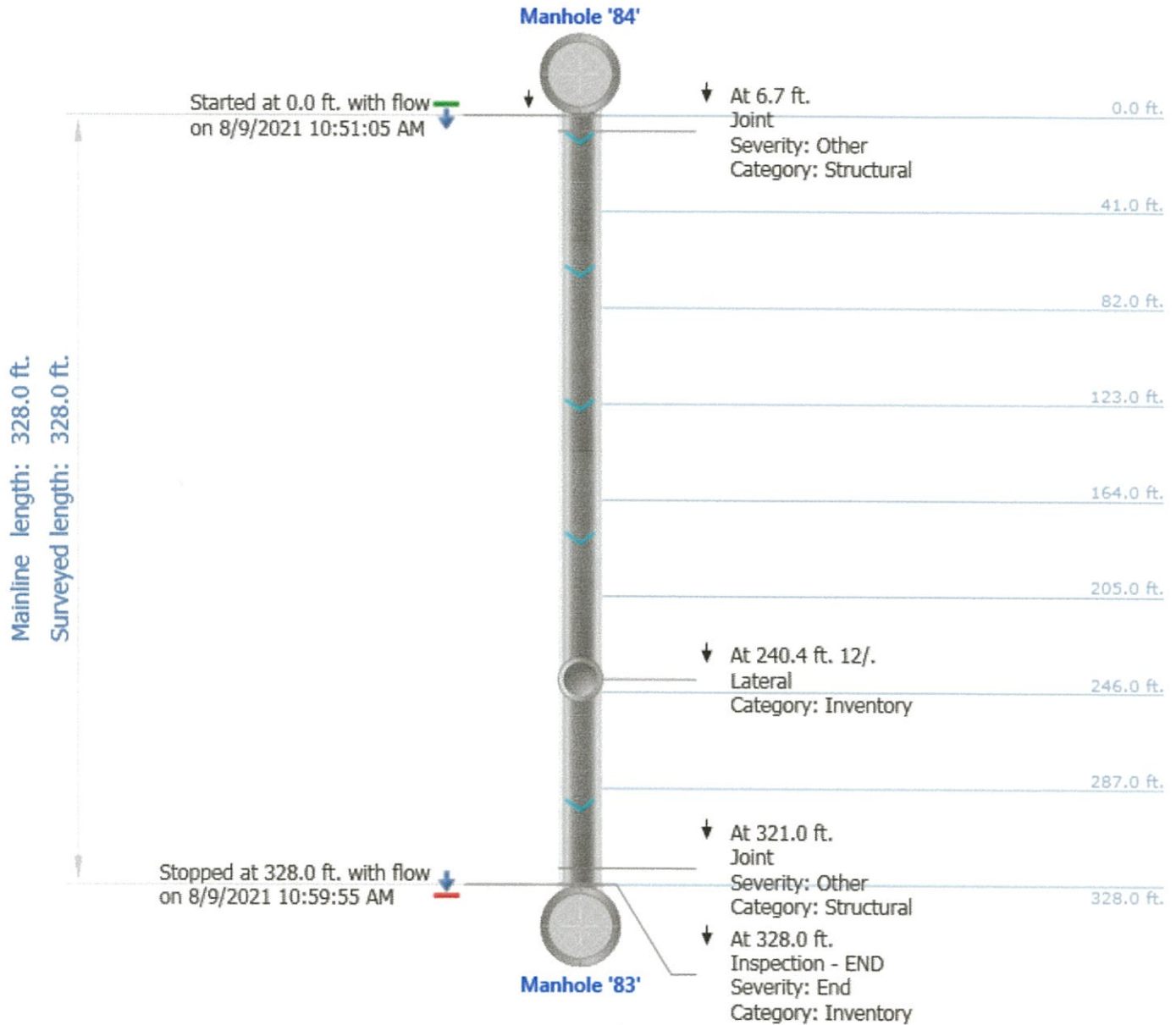
Main Inspections Pipe Run

Project name: 8/9/21 RUMSON OSPREY LN DVD 2	Mainline ID: RUMSON SHREWSBURY DR 85 TO 84	City: RUMSON NJ	Address: SHREWSBURY DR
Start date/time: 8/9/2021 10:36 AM	Direction: With the flow	Weather: Dry	Surface condition: Asphalt
Pipe shape: Circular	Pipe material: Clay ESVP	Pipe height: 12.0 in.	Pipe width:



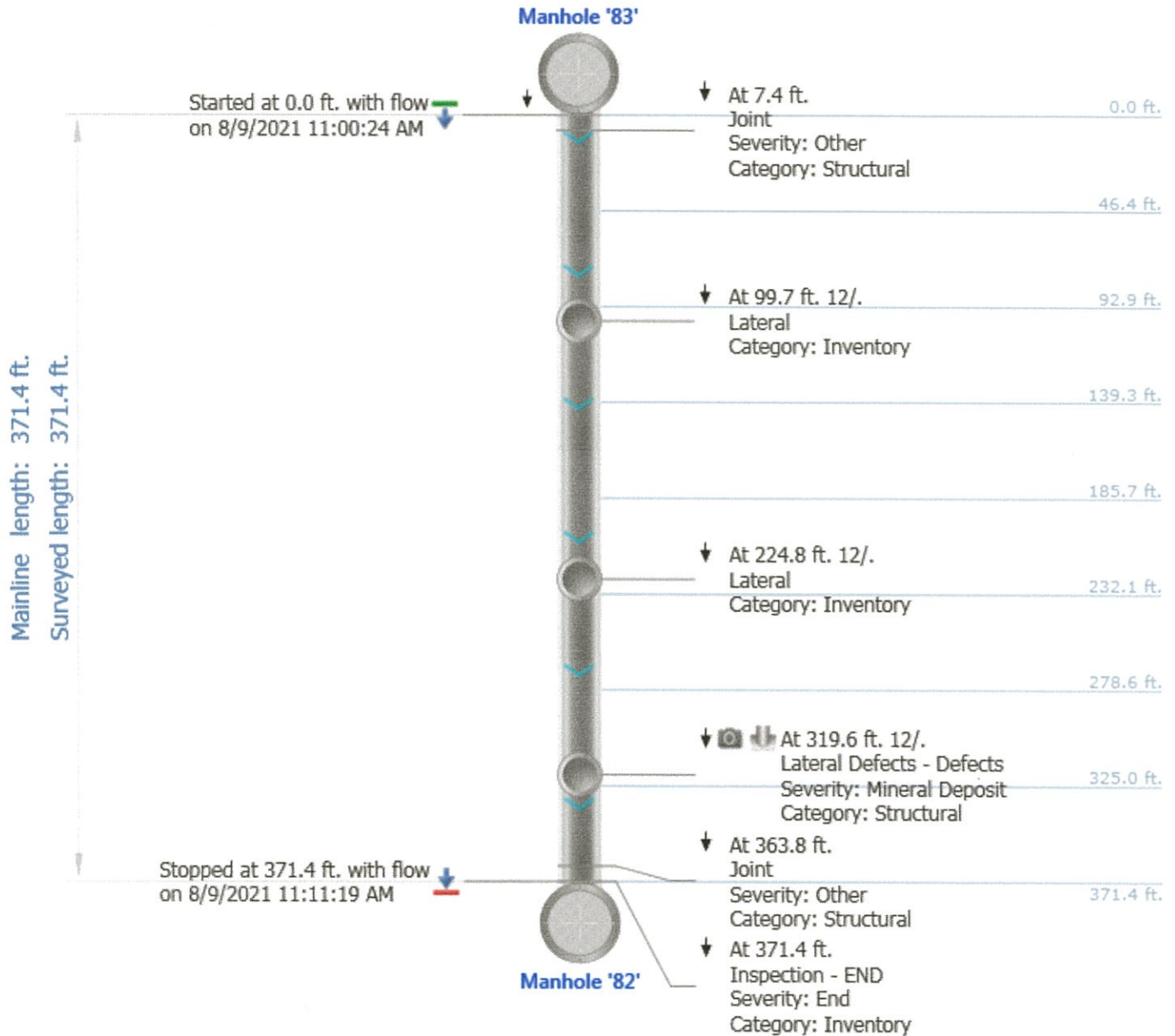
Main Inspections Pipe Run

Project name: 8/9/21 RUMSON OSPREY LN DVD 2	Mainline ID: RUMSON SHREWSBURY DR 84 TO 83	City: RUMSON NJ	Address: SHREWSBURY DR
Start date/time: 8/9/2021 10:51 AM	Direction: With the flow	Weather: Dry	Surface condition: Asphalt
Pipe shape: Circular	Pipe material: Clay ESVP	Pipe height: 12.0 in.	Pipe width:



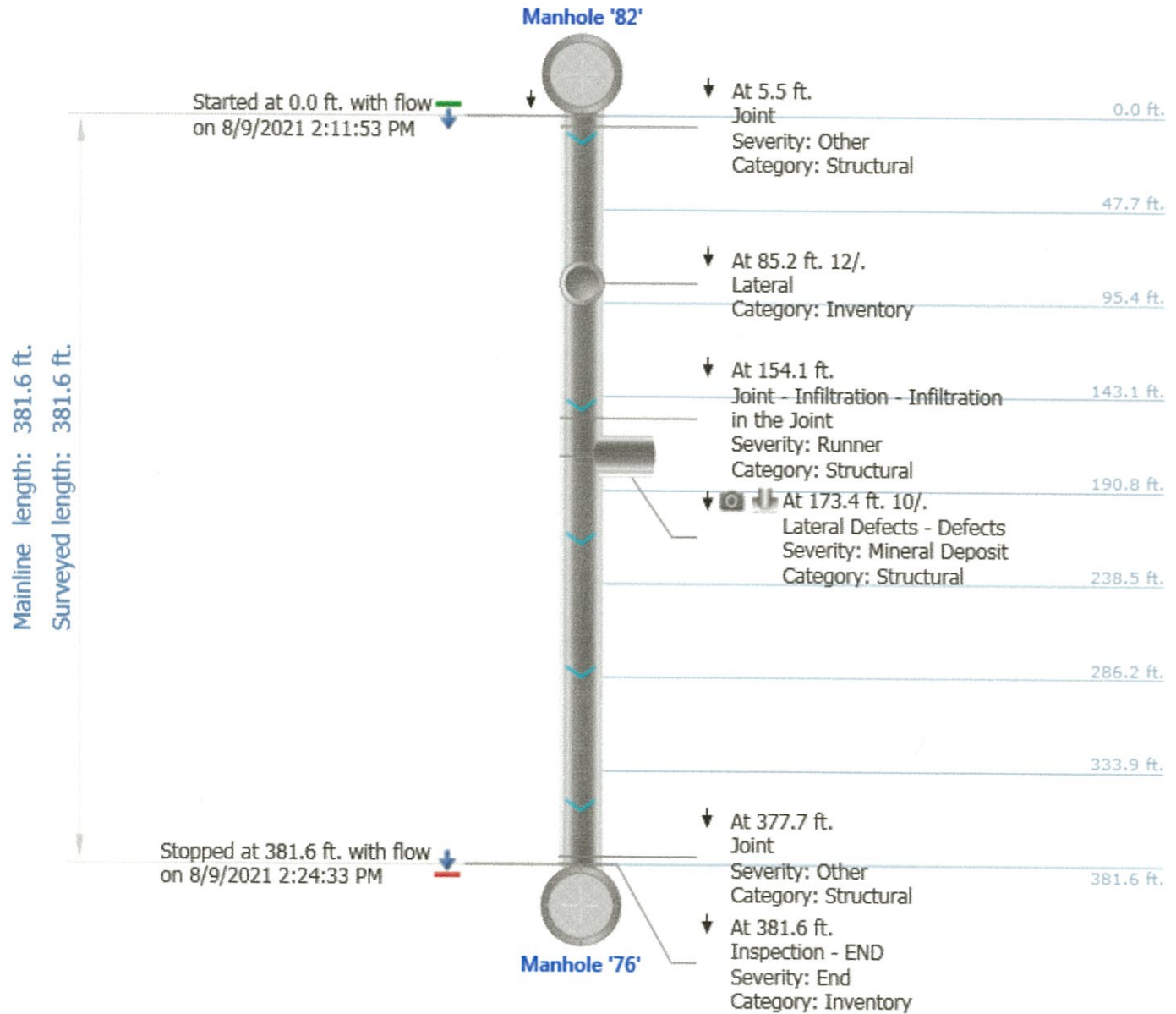
Main Inspections Pipe Run

Project name: 8/9/21 RUMSON OSPREY LN DVD 2	Mainline ID: RUMSON SHREWSBURY DR 83 TO 82	City: RUMSON NJ	Address: SHREWSBURY DR
Start date/time: 8/9/2021 11:00 AM	Direction: With the flow	Weather: Dry	Surface condition: Asphalt
Pipe shape: Circular	Pipe material: Clay ESVP	Pipe height: 12.0 in.	Pipe width:



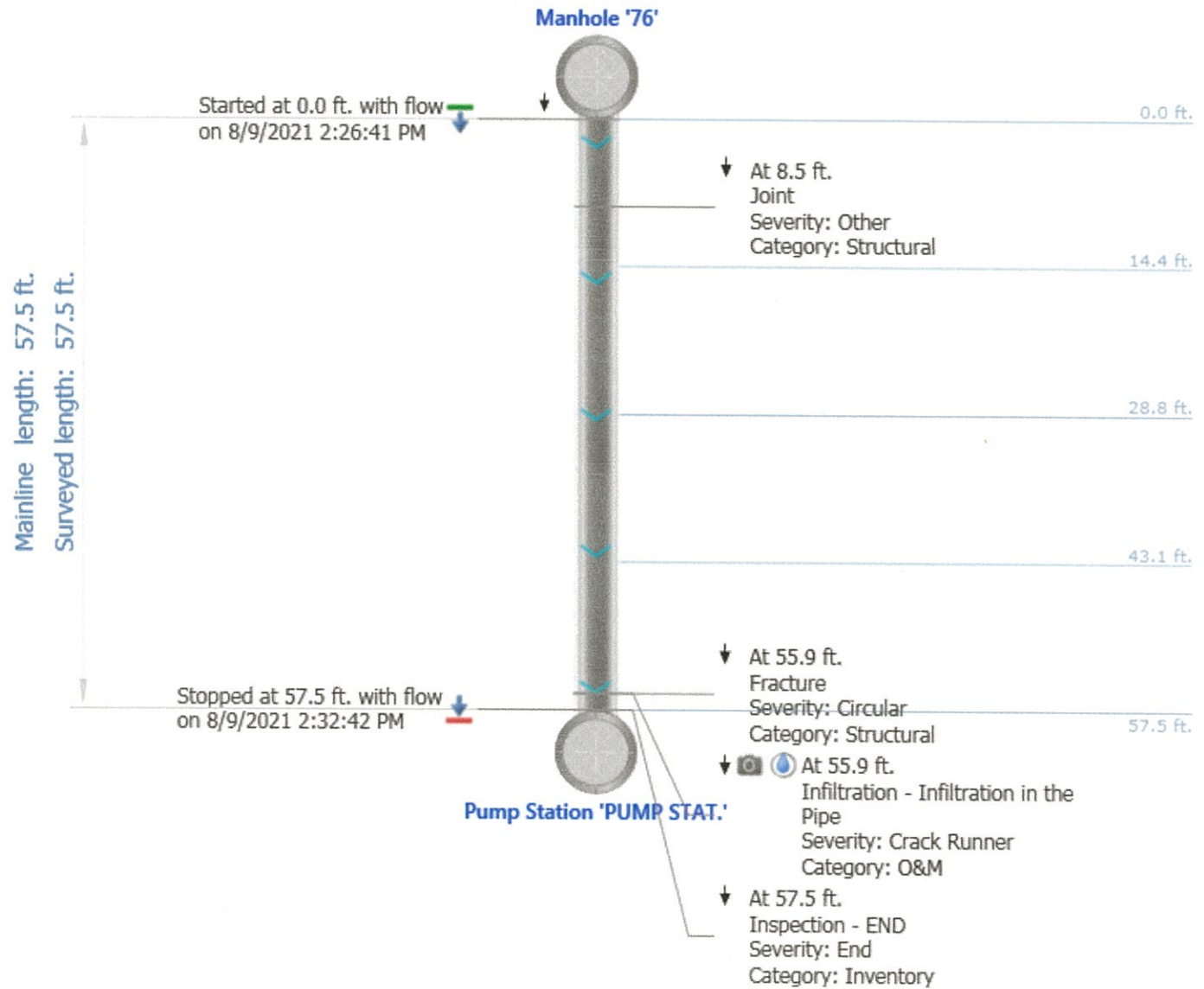
Main Inspections Pipe Run

Project name:	Mainline ID:	City:	Address:
8/9/21 RUMSON OSPREY LN DVD 2	RUMSON SHREWSBURY DR 82 TO 76	RUMSON NJ	SHREWSBURY DR
Start date/time:	Direction:	Weather:	Surface condition:
8/9/2021 2:11 PM	With the flow	Dry	Asphalt
Pipe shape:	Pipe material:	Pipe height:	Pipe width:
Circular	Clay ESVP	12.0 in.	



Main Inspections Pipe Run

Project name: 8/9/21 RUMSON OSPREY LN DVD 2	Mainline ID: RUMSON SHREWSBURY DR 76 TO PUMP STAT.	City: RUMSON NJ	Address: SHREWSBURY DR
Start date/time: 8/9/2021 2:26 PM	Direction: With the flow	Weather: Dry	Surface condition: Asphalt
Pipe shape: Circular	Pipe material: Clay ESVP	Pipe height: 12.0 in.	Pipe width:



Main Inspections Small Photos

Mainline ID: RUMSON OSPREY LN 87 TO 85	City: RUMSON NJ	Address: OSPREY LN	Project name: 8/9/21 RUMSON OSPREY LN GROUTING DVD 2
Start date/time: 8/9/2021 7:31 AM	Asset length: 396.3 ft.	Weather: Dry	Operator: John Read
Upstream node: 87	Depth US:	Downstream node: 85	Depth DS:
Pipe shape: Circular	Pipe material: Clay ESVP	Pipe height: 8.0 in.	Pipe width:
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
5.6 ft.	D		/	Joint	Passed the air test		
11.4 ft.	D		/	Joint	Passed the air test		
15.1 ft.	D		/	Joint	Passed the air test		
20.7 ft.	D		/	Joint	Passed the air test		
27.3 ft.	D		/	Joint	Passed the air test		
30.7 ft.	D		/	Joint	Passed the air test		
35.4 ft.	D		/	Joint	Passed the air test		
40.8 ft.	D		/	Joint	Passed the air test		
46.7 ft.	D		/	Joint	Passed the air test		
52.8 ft.	D		/	Joint	Passed the air test		
56.0 ft.	D		/	Joint	Passed the air test		
60.8 ft.	D		/	Joint	Passed the air test		

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
66.1 ft.	D		/	Joint	Is Now Sealed		1 GALLON
71.6 ft.	D		/	Joint	Passed the air test		
77.9 ft.	D		/	Joint	Passed the air test		
83.8 ft.	D		/	Joint	Passed the air test		
86.3 ft.	D		/	Joint	Passed the air test		
91.8 ft.	D		/	Joint	Passed the air test		
97.5 ft.	D		/	Joint	Passed the air test		
103.8 ft.	D		/	Joint	Passed the air test		
109.5 ft.	D		/	Joint	Passed the air test		
109.5 ft.	D		/	Joint	Passed the air test		
116.5 ft.	D		/	Joint	Passed the air test		
119.5 ft.	D		/	Joint	Passed the air test		
124.2 ft.	D		/	Joint	Passed the air test		
130.1 ft.	D		/	Joint	Passed the air test		
136.3 ft.	D		/	Joint	Passed the air test		
141.1 ft.	D		/	Joint	Passed the air test		
144.8 ft.	D		/	Joint	Passed the air test		
149.9 ft.	D		/	Joint	Passed the air test		
155.9 ft.	D		/	Joint	Passed the air test		
161.2 ft.	D		/	Joint	Passed the air test		
165.3 ft.	D		/	Joint	Is Now Sealed		2 GALLONS
170.3 ft.	D		/	Joint	Passed the air test		

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
175.7 ft.	D		/	Joint	Passed the air test		
181.7 ft.	D		/	Joint	Passed the air test		
187.4 ft.	D		/	Joint	Passed the air test		
190.9 ft.	D		/	Joint	Passed the air test		
196.0 ft.	D		/	Joint	Passed the air test		
201.6 ft.	D		/	Joint	Passed the air test		
207.7 ft.	D		/	Joint	Passed the air test		
213.9 ft.	D		/	Joint	Passed the air test		
216.7 ft.	D		/	Joint	Passed the air test		
221.6 ft.	D		/	Joint	Passed the air test		
227.0 ft.	D		/	Joint	Passed the air test		
233.0 ft.	D		/	Joint	Passed the air test		
239.1 ft.	D		/	Joint	Is Now Sealed		1 GALLON
244.6 ft.	D		/	Joint	Is Now Sealed		1 GALLON
247.6 ft.	D		/	Joint	Passed the air test		
252.7 ft.	D		/	Joint	Passed the air test		
257.9 ft.	D		/	Joint	Passed the air test		
263.6 ft.	D		/	Joint	Passed the air test		
269.0 ft.	D		/	Joint	Passed the air test		
274.7 ft.	D		/	Joint	Passed the air test		
280.1 ft.	D		/	Joint	Passed the air test		
285.8 ft.	D		/	Joint	Passed the air test		

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
289.9 ft.	D		/	Joint	Passed the air test		
293.9 ft.	D		/	Joint	Passed the air test		
299.0 ft.	D		/	Joint	Passed the air test		
304.4 ft.	D		/	Joint	Passed the air test		
309.9 ft.	D		/	Joint	Passed the air test		
315.6 ft.	D		/	Joint	Passed the air test		
320.7 ft.	D		/	Joint	Passed the air test		
324.7 ft.	D		/	Joint	Passed the air test		
329.8 ft.	D		/	Joint	Passed the air test		
333.9 ft.	D		/	Joint	Passed the air test		
335.2 ft.	D		/	Joint	Passed the air test		
340.5 ft.	D		/	Joint	Passed the air test		
346.3 ft.	D		/	Joint	Passed the air test		
352.1 ft.	D		/	Joint	Passed the air test		
355.9 ft.	D		/	Joint	Passed the air test		
360.7 ft.	D		/	Joint	Passed the air test		
365.7 ft.	D		/	Joint	Passed the air test		
371.1 ft.	D		/	Joint	Passed the air test		
376.3 ft.	D		/	Joint	Passed the air test		
381.6 ft.	D		/	Joint	Passed the air test		
387.1 ft.	D		/	Joint	Passed the air test		
391.5 ft.	D		/	Joint	Passed the air test		

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
391.5 ft.	D		/	Inspection	End		

Inspection's photos

Main Inspections Small Photos

Mainline ID: RUMSON SHREWSBURY DR 85 TO 84	City: RUMSON NJ	Address: SHREWSBURY DR	Project name: 8/9/21 RUMSON OSPREY LN DVD 2
Start date/time: 8/9/2021 10:36 AM	Asset length: 44.3 ft.	Weather: Dry	Operator: John Read
Upstream node: 85	Depth US:	Downstream node: 84	Depth DS:
Pipe shape: Circular	Pipe material: Clay ESVP	Pipe height: 12.0 in.	Pipe width:
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
10.1 ft.	D		/	Joint	Other		
40.6 ft.	D		/	Joint	Other		
44.3 ft.	D		/	Inspection	End		

Inspection's photos

Main Inspections Small Photos

Mainline ID: RUMSON SHREWSBURY DR 84 TO 83	City: RUMSON NJ	Address: SHREWSBURY DR	Project name: 8/9/21 RUMSON OSPREY LN DVD 2
Start date/time: 8/9/2021 10:51 AM	Asset length: 328.0 ft.	Weather: Dry	Operator: John Read
Upstream node: 84	Depth US: 83	Downstream node: 83	Depth DS:
Pipe shape: Circular	Pipe material: Clay ESVP	Pipe height: 12.0 in.	Pipe width:
Comments:			

Observations

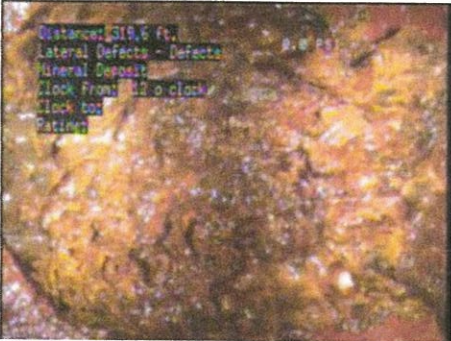
Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
6.7 ft.	D		/	Joint	Other		
240.4 ft.	D		12 /	Lateral			
321.0 ft.	D		/	Joint	Other		
328.0 ft.	D		/	Inspection	End		

Inspection's photos

Main Inspections Small Photos

Mainline ID: RUMSON SHREWSBURY DR 83 TO 82	City: RUMSON NJ	Address: SHREWSBURY DR	Project name: 8/9/21 RUMSON OSPREY LN DVD 2
Start date/time: 8/9/2021 11:00 AM	Asset length: 371.4 ft.	Weather: Dry	Operator: John Read
Upstream node: 83	Depth US:	Downstream node: 82	Depth DS:
Pipe shape: Circular	Pipe material: Clay ESVP	Pipe height: 12.0 in.	Pipe width:
Comments:			

Observations

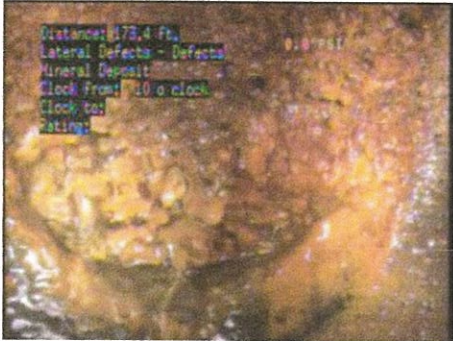
Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
7.4 ft.	D		/	Joint	Other		
99.7 ft.	D		12 /	Lateral			
224.8 ft.	D		12 /	Lateral			
319.6 ft.	D		12 /	Lateral Defects	Mineral Deposit		
							
363.8 ft.	D		/	Joint	Other		
371.4 ft.	D		/	Inspection	End		

Inspection's photos

Main Inspections Small Photos

Mainline ID: RUMSON SHREWSBURY DR 82 TO 76	City: RUMSON NJ	Address: SHREWSBURY DR	Project name: 8/9/21 RUMSON OSPREY LN DVD 2
Start date/time: 8/9/2021 2:11 PM	Asset length: 381.6 ft.	Weather: Dry	Operator: John Read
Upstream node: 82	Depth US: 	Downstream node: 76	Depth DS:
Pipe shape: Circular	Pipe material: Clay ESVP	Pipe height: 12.0 in.	Pipe width:
Comments:			

Observations

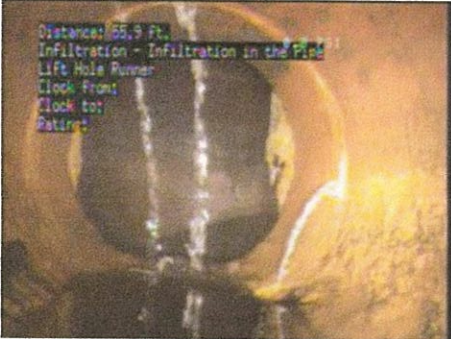
Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
5.5 ft.	D		/	Joint	Other		
85.2 ft.	D		12 /	Lateral			
154.1 ft.	D		/	Joint - Infiltration	Runner		
173.4 ft.	D		10 /	Lateral Defects	Mineral Deposit		
							
377.7 ft.	D		/	Joint	Other		
381.6 ft.	D		/	Inspection	End		

Inspection's photos

Main Inspections Small Photos

Mainline ID: RUMSON SHREWSBURY DR 76 TO PUMP STAT.	City: RUMSON NJ	Address: SHREWSBURY DR	Project name: 8/9/21 RUMSON OSPREY LN DVD 2
Start date/time: 8/9/2021 2:26 PM	Asset length: 57.5 ft.	Weather: Dry	Operator: John Read
Upstream node: 76	Depth US:	Downstream node: PUMP STAT.	Depth DS:
Pipe shape: Circular	Pipe material: Clay ESVP	Pipe height: 12.0 in.	Pipe width:
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
8.5 ft.	D		/	Joint	Other		
55.9 ft.	D		/	Fracture	Circular		
55.9 ft.	D		/	Infiltration	Crack Runner		
							
57.5 ft.	D		/	Inspection	End		

Inspection's photos

Main Inspections Small Photos

Mainline ID: RUMSON SHREWSBURY DR 85 TO 84	City: RUMSON NJ	Address: SHREWSBURY DR	Project name: 8/9/21 RUMSON OSPREY LN GROUTING DVD 2
Start date/time: 8/10/2021 8:23 AM	Asset length: 44.3 ft.	Weather: Dry	Operator: John Read
Upstream node: 85	Depth US: 	Downstream node: 84	Depth DS:
Pipe shape: Circular	Pipe material: Clay ESVP	Pipe height: 12.0 in.	Pipe width:
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
5.4 ft.	D		/	Joint	Passed the air test		
10.3 ft.	D		/	Joint	Passed the air test		
16.9 ft.	D		/	Joint	Passed the air test		
22.9 ft.	D		/	Joint	Passed the air test		
29.0 ft.	D		/	Joint	Passed the air test		
35.0 ft.	D		/	Joint	Passed the air test		
41.1 ft.	D		/	Joint	Passed the air test		
43.9 ft.	D		/	Inspection	End		

Inspection's photos

Main Inspections Small Photos

Mainline ID: RUMSON SHREWSBURY DR 84 TO 83	City: RUMSON NJ	Address: SHREWSBURY DR	Project name: 8/9/21 RUMSON OSPREY LN GROUTING DVD 2
Start date/time: 8/10/2021 8:49 AM	Asset length: 328.0 ft.	Weather: Dry	Operator: John Read
Upstream node: 84	Depth US: 	Downstream node: 83	Depth DS:
Pipe shape: Circular	Pipe material: Clay ESVP	Pipe height: 12.0 in.	Pipe width:
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
6.8 ft.	D		/	Joint	Passed the air test		
13.9 ft.	D		/	Joint	Passed the air test		
20.7 ft.	D		/	Joint	Passed the air test		
26.9 ft.	D		/	Joint	Passed the air test		
32.4 ft.	D		/	Joint	Passed the air test		
37.8 ft.	D		/	Joint	Passed the air test		
44.6 ft.	D		/	Joint	Passed the air test		
50.8 ft.	D		/	Joint	Passed the air test		
56.9 ft.	D		/	Joint	Passed the air test		
62.9 ft.	D		/	Joint	Passed the air test		
68.8 ft.	D		/	Joint	Passed the air test		
74.6 ft.	D		/	Joint	Passed the air test		
80.8 ft.	D		/	Joint	Passed the air test		
87.2 ft.	D		/	Joint	Passed the air test		
93.6 ft.	D		/	Joint	Passed the air test		

Observations

Distance	Dir. Length	From/To	Code	Modifier/Severity	Rating	Comments
99.5 ft.	D	/	Joint	Passed the air test		
105.7 ft.	D	/	Joint	Passed the air test		
112.0 ft.	D	/	Joint	Passed the air test		
117.9 ft.	D	/	Joint	Passed the air test		
124.0 ft.	D	/	Joint	Passed the air test		
131.4 ft.	D	/	Joint	Passed the air test		
137.0 ft.	D	/	Joint	Passed the air test		
143.0 ft.	D	/	Joint	Passed the air test		
150.0 ft.	D	/	Joint	Passed the air test		
155.2 ft.	D	/	Joint	Passed the air test		
162.2 ft.	D	/	Joint	Passed the air test		
167.5 ft.	D	/	Joint	Passed the air test		
173.1 ft.	D	/	Joint	Passed the air test		
180.4 ft.	D	/	Joint	Passed the air test		
185.3 ft.	D	/	Joint	Passed the air test		
191.5 ft.	D	/	Joint	Passed the air test		
198.4 ft.	D	/	Joint	Passed the air test		
204.4 ft.	D	/	Joint	Passed the air test		
210.5 ft.	D	/	Joint	Passed the air test		
216.4 ft.	D	/	Joint	Passed the air test		
222.3 ft.	D	/	Joint	Passed the air test		
227.9 ft.	D	/	Joint	Passed the air test		

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
234.0 ft.	D		/	Joint	Passed the air test		
240.6 ft.	D		/	Joint	Passed the air test		
242.1 ft.	D		/	Joint	Passed the air test		
248.5 ft.	D		/	Joint	Passed the air test		
254.7 ft.	D		/	Joint	Passed the air test		
261.0 ft.	D		/	Joint	Passed the air test		
267.2 ft.	D		/	Joint	Passed the air test		
275.4 ft.	D		/	Joint	Passed the air test		
279.6 ft.	D		/	Joint	Passed the air test		
285.9 ft.	D		/	Joint	Passed the air test		
291.9 ft.	D		/	Joint	Passed the air test		
297.3 ft.	D		/	Inspection	End		
297.7 ft.	D		/	Joint	Passed the air test		

Inspection's photos

Main Inspections Small Photos

Mainline ID: RUMSON SHREWSBURY DR 84 TO 83	City: RUMSON NJ	Address: SHREWSBURY DR	Project name: 8/9/21 RUMSON OSPREY LN GROUTING DVD 2
Start date/time: 8/10/2021 11:36 AM	Asset length: 328.0 ft.	Weather: Dry	Operator: John Read
Upstream node: 84	Depth US:	Downstream node: 83	Depth DS:
Pipe shape: Circular	Pipe material: Clay ESVP	Pipe height: 12.0 in.	Pipe width:
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
297.7 ft.	D		/	Inspection.			
303.9 ft.	D		/	Joint	Passed the air test		
310.4 ft.	D		/	Joint	Passed the air test		
316.3 ft.	D		/	Joint	Passed the air test		
322.2 ft.	D		/	Joint	Passed the air test		
323.7 ft.	D		/	Inspection	End		

Inspection's photos

Main Inspections Small Photos

Mainline ID: RUMSON SHREWSBURY DR 82 TO 76	City: RUMSON NJ	Address: SHREWSBURY DR	Project name: 8/9/21 RUMSON OSPREY LN DVD 2
Start date/time: 8/10/2021 1:18 PM	Asset length: 381.6 ft.	Weather: Dry	Operator: John Read
Upstream node: 82	Depth US:	Downstream node: 76	Depth DS:
Pipe shape: Circular	Pipe material: Clay ESVP	Pipe height: 12.0 in.	Pipe width:
Comments:			

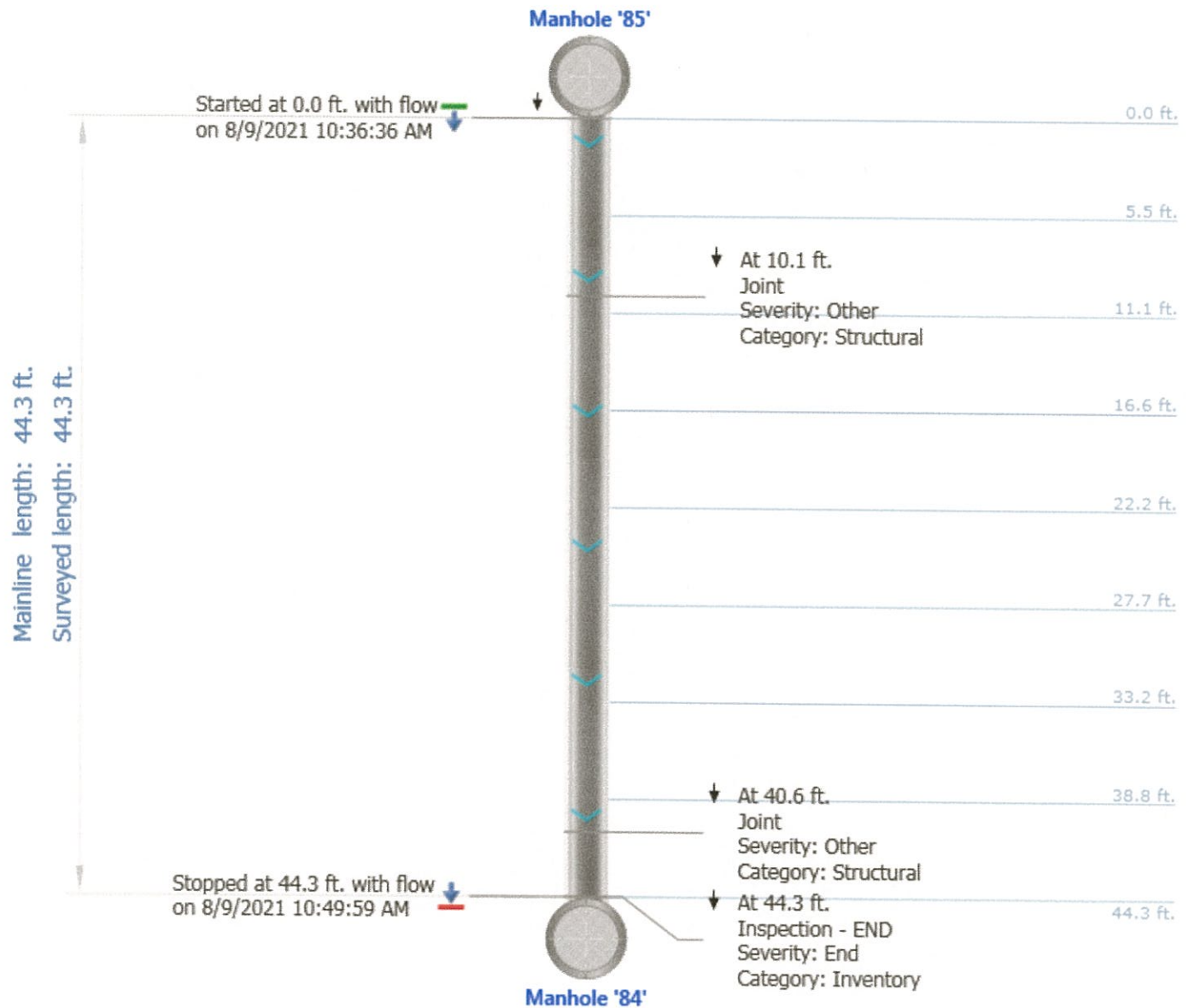
Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
153.6 ft.	D		/	Joint	Is Now Sealed		3 GALLONS
169.7 ft.	D		/	Inspection	End		
171.8 ft.	D		10 /	Lateral Defects	Is Now Sealed		3 GALLONS

Inspection's photos

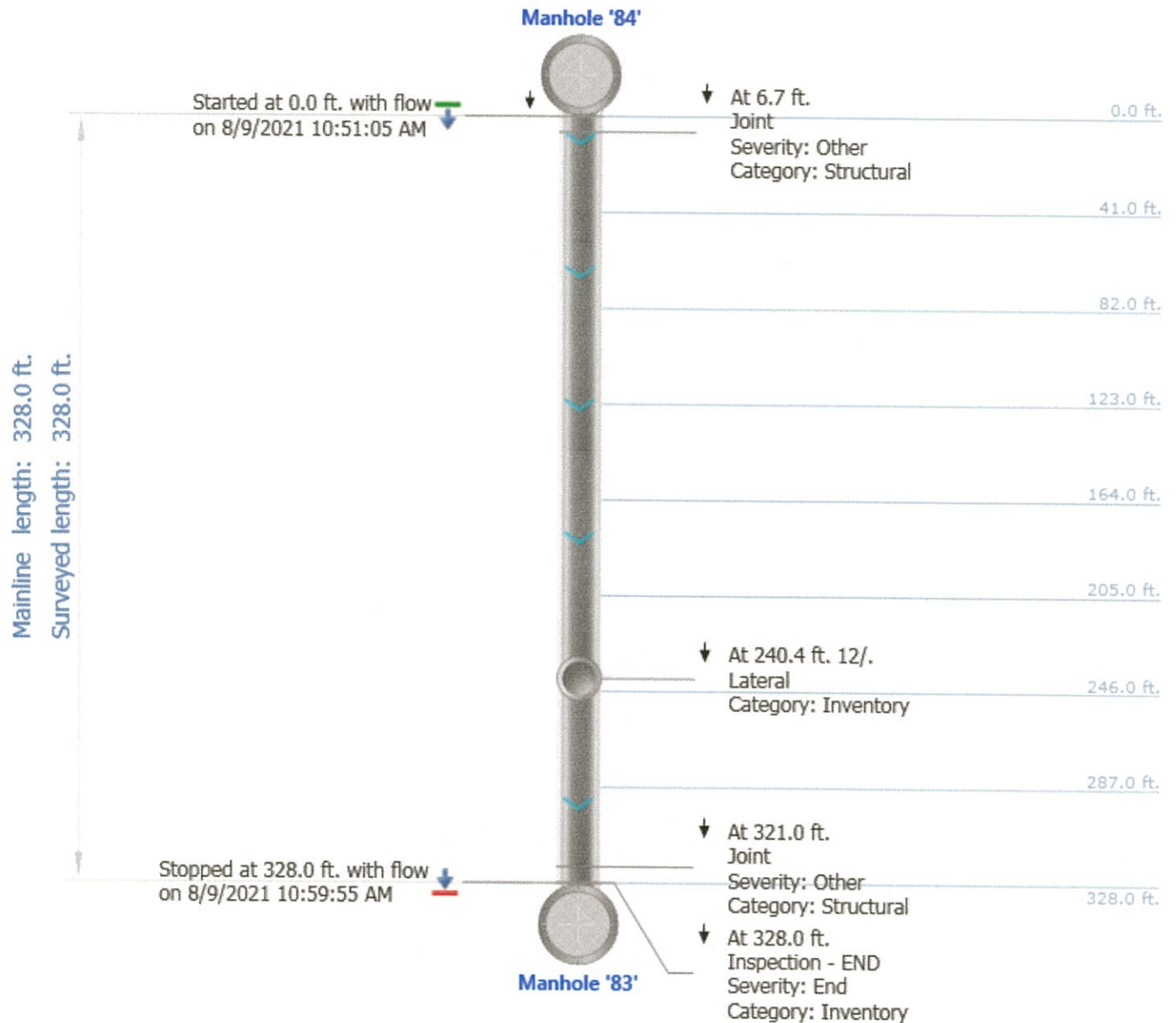
Main Inspections Pipe Run

Project name: 8/9/21 RUMSON OSPREY LN DVD 2	Mainline ID: RUMSON SHREWSBURY DR 85 TO 84	City: RUMSON NJ	Address: SHREWSBURY DR
Start date/time: 8/9/2021 10:36 AM	Direction: With the flow	Weather: Dry	Surface condition: Asphalt
Pipe shape: Circular	Pipe material: Clay ESVP	Pipe height: 12.0 in.	Pipe width:



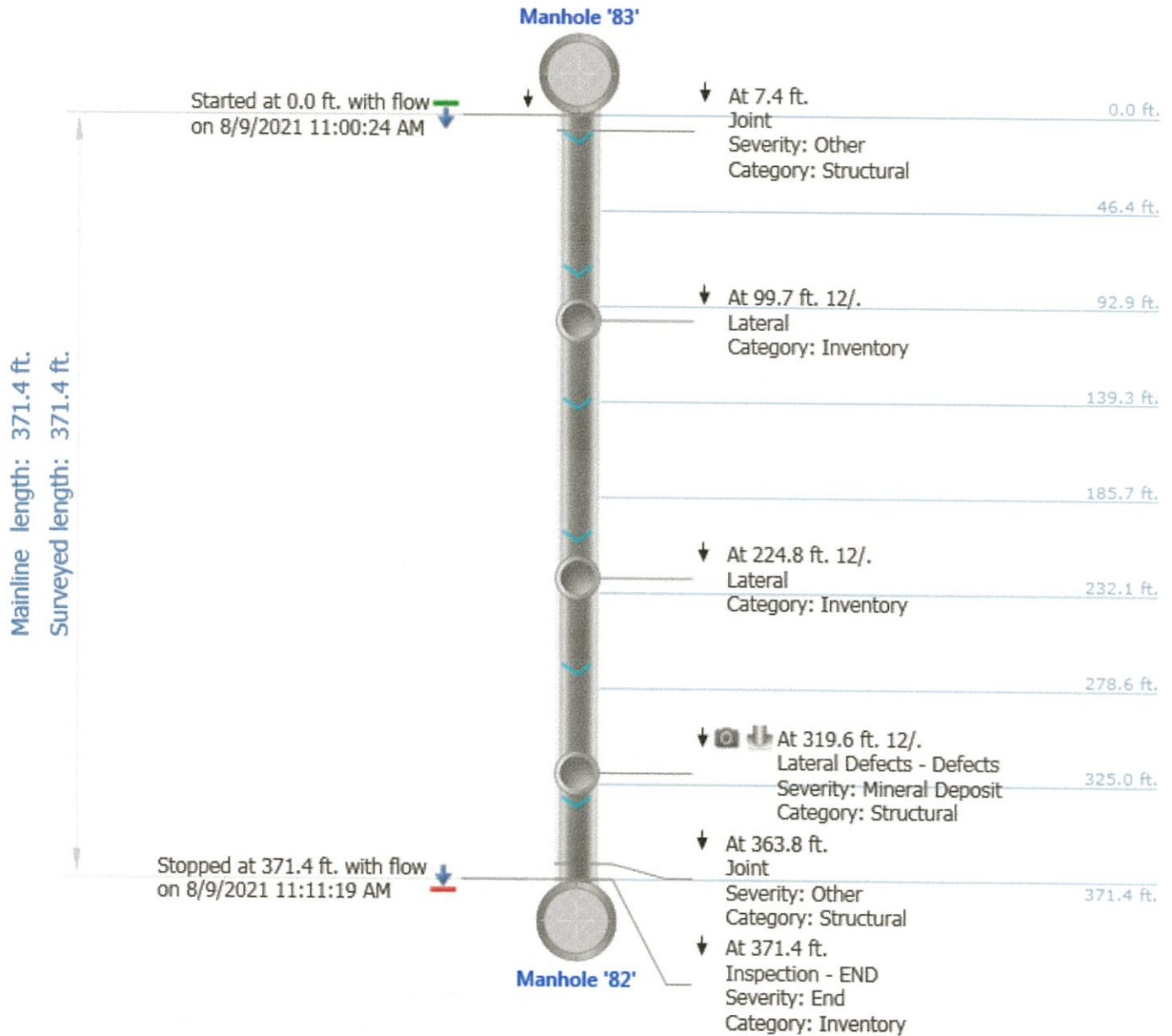
Main Inspections Pipe Run

Project name: 8/9/21 RUMSON OSPREY LN DVD 2	Mainline ID: RUMSON SHREWSBURY DR 84 TO 83	City: RUMSON NJ	Address: SHREWSBURY DR
Start date/time: 8/9/2021 10:51 AM	Direction: With the flow	Weather: Dry	Surface condition: Asphalt
Pipe shape: Circular	Pipe material: Clay ESVP	Pipe height: 12.0 in.	Pipe width:



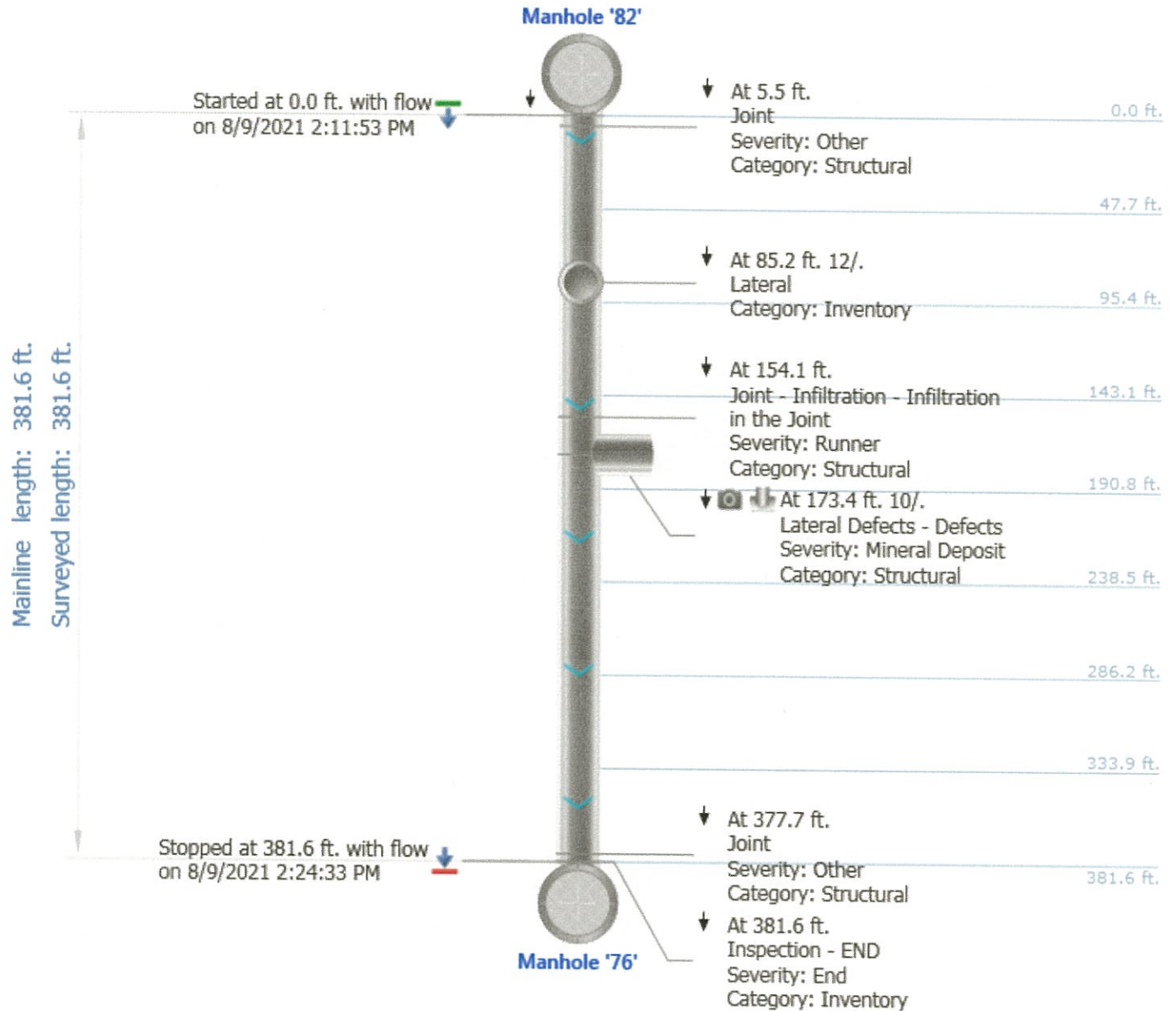
Main Inspections Pipe Run

Project name: 8/9/21 RUMSON OSPREY LN DVD 2	Mainline ID: RUMSON SHREWSBURY DR 83 TO 82	City: RUMSON NJ	Address: SHREWSBURY DR
Start date/time: 8/9/2021 11:00 AM	Direction: With the flow	Weather: Dry	Surface condition: Asphalt
Pipe shape: Circular	Pipe material: Clay ESVP	Pipe height: 12.0 in.	Pipe width:



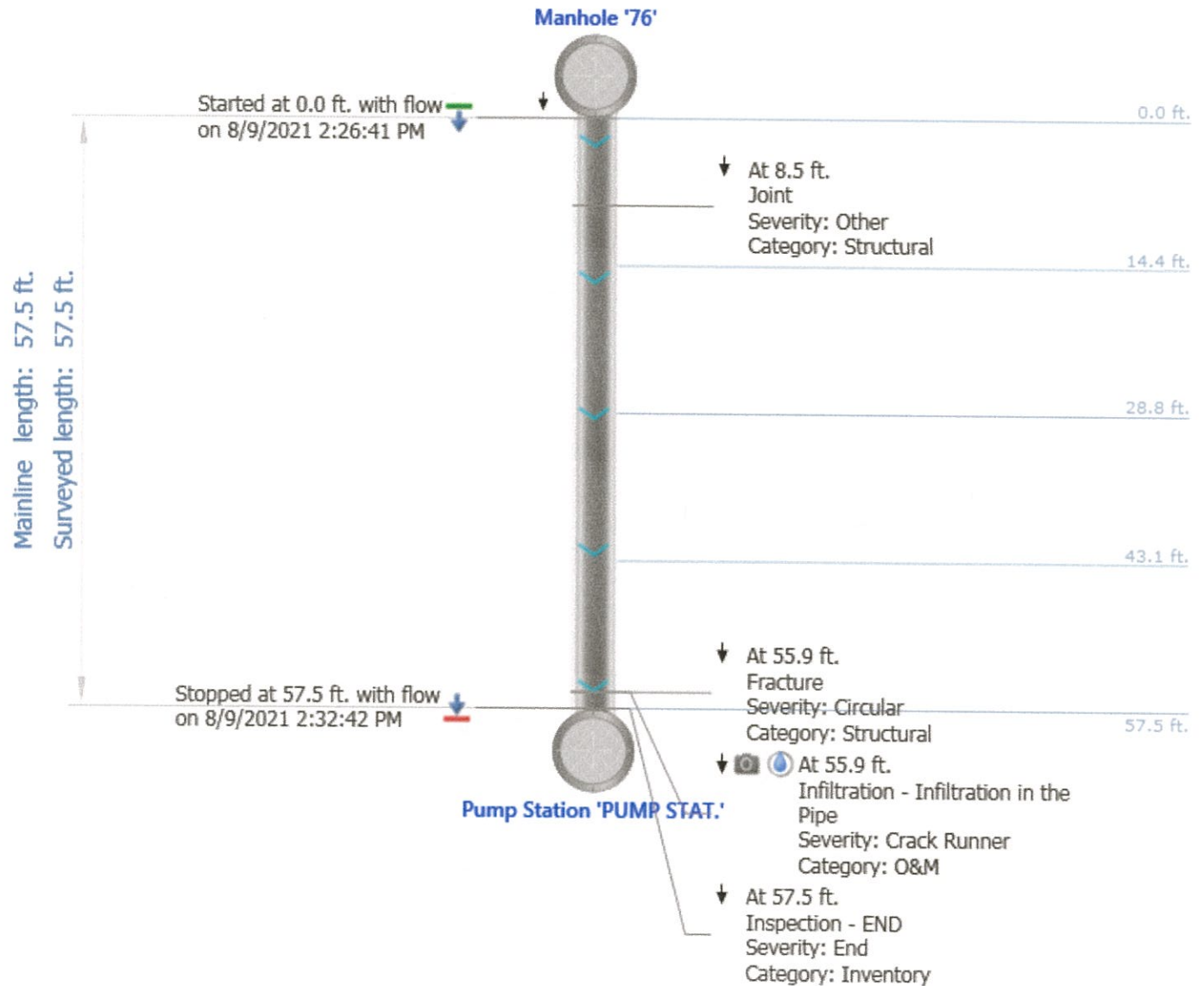
Main Inspections Pipe Run

Project name: 8/9/21 RUMSON OSPREY LN DVD 2	Mainline ID: RUMSON SHREWSBURY DR 82 TO 76	City: RUMSON NJ	Address: SHREWSBURY DR
Start date/time: 8/9/2021 2:11 PM	Direction: With the flow	Weather: Dry	Surface condition: Asphalt
Pipe shape: Circular	Pipe material: Clay ESVP	Pipe height: 12.0 in.	Pipe width:



Main Inspections Pipe Run

Project name: 8/9/21 RUMSON OSPREY LN DVD 2	Mainline ID: RUMSON SHREWSBURY DR 76 TO PUMP STAT.	City: RUMSON NJ	Address: SHREWSBURY DR
Start date/time: 8/9/2021 2:26 PM	Direction: With the flow	Weather: Dry	Surface condition: Asphalt
Pipe shape: Circular	Pipe material: Clay ESVP	Pipe height: 12.0 in.	Pipe width:



Oswald ENTERPRISES, INC.

YELLOW BROOK PROPERTY COMPANY
247 BRIDGE AVENUE
RED BANK, NEW JERSEY 07701

DVD 3
T.V. INSPECTION AND CHEMICAL GROUTING
OF VARIOUS SANITARY SEWER LINES
OSPREY LANE, RUMSON

AUGUST 11, 2021

OSWALD ENTERPRISES, INC.
161 EAST ROAD - P.O. BOX 126
BELFORD, NEW JERSEY 07718

Main Office: 161 East Road, P.O. Box 126, Belford, New Jersey 07718
Phone: 732-787-1436 • Fax: 732-495-4990
www.OswaldEnt.com

Main Inspections Small Photos

Mainline ID: RUMSON OSPREY LN 90 TO 89	City: RUMSON NJ	Address: OSPREY LN	Project name: 8/11/21 RUMSON OSPREY LN DVD 3
Start date/time: 8/11/2021 7:00 AM	Asset length: 202.4 ft.	Weather: Dry	Operator: John Read
Upstream node: 90	Depth US:	Downstream node: 89	Depth DS:
Pipe shape: Circular	Pipe material: Clay ESVP	Pipe height: 8.0 in.	Pipe width:
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
4.7 ft.	D		/	Joint	Other		
5.5 ft.	D		9 /	Lateral	Capped		
6.4 ft.	D		/	Joint	Other		
11.2 ft.	D		/	Joint	Other		
26.8 ft.	D	1.3 ft.	/	Crack Joint	Longitudinal		
41.8 ft.	D	1.5 ft.	/	Crack Joint	Multiple		
47.0 ft.	D	1.3 ft.	12 /	Crack Joint	Longitudinal		
57.1 ft.	D	1.7 ft.	9 /	Crack Joint	Longitudinal		
62.2 ft.	D	1.9 ft.	3 /	Crack Joint	Longitudinal		
72.8 ft.	D	1.4 ft.	4 /	Crack Joint	Longitudinal		
98.5 ft.	D	1.3 ft.	9 /	Crack Joint	Longitudinal		
103.8 ft.	D	1.2 ft.	12 /	Crack Joint	Longitudinal		

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
140.1 ft.	D		/	Joint - Infiltration	Weeper		
140.5 ft.	D		9 /	Lateral	Running Water		
146.7 ft.	D	1.2 ft.	5 /	Crack Joint	Longitudinal		
198.8 ft.	D		/	Joint	Other		
202.4 ft.	D		/	Inspection	End		

Inspection's photos

Main Inspections Small Photos

Mainline ID: RUMSON OSPREY LN 90 TO 89	City: RUMSON NJ	Address: OSPREY LN	Project name: 8/11/21 RUMSON OSPREY LN GROUTING DVD 3
Start date/time: 8/11/2021 8:03 AM	Asset length: 202.4 ft.	Weather: Dry	Operator: John Read
Upstream node: 90	Depth US:	Downstream node: 89	Depth DS:
Pipe shape: Circular	Pipe material: Clay ESVP	Pipe height: 8.0 in.	Pipe width:
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
4.7 ft.	D		/	Joint	Passed the air test		
6.4 ft.	D		/	Joint	Passed the air test		
11.2 ft.	D		/	Joint	Passed the air test		
17.1 ft.	D		/	Joint	Passed the air test		
23.7 ft.	D		/	Joint	Passed the air test		
27.0 ft.	D		/	Crack Joint	Is Now Sealed	2 GALLONS	
32.0 ft.	D		/	Joint	Passed the air test		
37.2 ft.	D		/	Joint	Passed the air test		
42.2 ft.	D		/	Crack Joint	Is Now Sealed	3 GALLONS	
48.1 ft.	D		/	Crack Joint	Is Now Sealed	1 GALLON	
52.4 ft.	D		/	Joint	Passed the air test		
57.6 ft.	D		/	Crack Joint	Is Now Sealed	2 GALLONS	
63.1 ft.	D		/	Crack Joint	Is Now Sealed	1 GALLON	
68.9 ft.	D		/	Joint	Is Now Sealed	1 GALLONS	
74.5 ft.	D		/	Crack Joint	Is Now Sealed	1 GALLON	

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
78.1 ft.	D		/	Joint	Passed the air test		
83.3 ft.	D		/	Joint	Passed the air test		
88.5 ft.	D		/	Joint	Passed the air test		
94.5 ft.	D		/	Joint	Passed the air test		
99.9 ft.	D		/	Crack Joint	Is Now Sealed	1 GALLON	
104.3 ft.	D		/	Crack Joint	Is Now Sealed	1 GALLON	
109.2 ft.	D		/	Joint	Passed the air test		
114.4 ft.	D		/	Joint	Passed the air test		
120.7 ft.	D		/	Joint	Passed the air test		
125.5 ft.	D		/	Joint	Repaired from outside		
130.0 ft.	D		/	Joint	Passed the air test		
134.8 ft.	D		/	Joint	Is Now Sealed	1 GALLON	
140.3 ft.	D		/	Joint	Is Now Sealed	1 GALLON	
142.1 ft.	D		/	Joint	Passed the air test		
147.4 ft.	D		/	Joint	Passed the air test		
152.4 ft.	D		/	Joint	Passed the air test		
158.0 ft.	D		/	Joint	Passed the air test		
162.6 ft.	D		/	Joint	Passed the air test		
167.7 ft.	D		/	Joint	Passed the air test		
172.8 ft.	D		/	Joint	Passed the air test		
178.5 ft.	D		/	Joint	Passed the air test		

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
183.7 ft.	D		/	Joint	Passed the air test		
188.3 ft.	D		/	Joint	Passed the air test		
193.3 ft.	D		/	Joint	Passed the air test		
198.9 ft.	D		/	Joint	Passed the air test		
198.9 ft.	D		/	Inspection	End		

Inspection's photos

Main Inspections Small Photos

Mainline ID: RUMSON SHREWSBURY DR 83 TO 82	City: RUMSON NJ	Address: SHREWSBURY DR	Project name: 8/11/21 RUMSON OSPREY LN DVD 3
Start date/time: 8/11/2021 10:14 AM	Asset length: 368.1 ft.	Weather: Dry	Operator: John Read
Upstream node: 83	Depth US:	Downstream node: 82	Depth DS:
Pipe shape: Circular	Pipe material: Clay ESVP	Pipe height: 12.0 in.	Pipe width:
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
99.0 ft.	D		12 /	Lateral			
223.2 ft.	D		12 /	Lateral			
317.1 ft.	D		12 /	Lateral Defects	Mineral Deposit		
368.1 ft.	D		/	Inspection	End		

Inspection's photos

Main Inspections Small Photos

Mainline ID: RUMSON SHREWSBURY DR 82 TO 76	City: RUMSON NJ	Address: SHREWSBURY DR	Project name: 8/11/21 RUMSON OSPREY LN DVD 3
Start date/time: 8/11/2021 10:30 AM	Asset length: 381.6 ft.	Weather: Dry	Operator: John Read
Upstream node: 82	Depth US:	Downstream node: 76	Depth DS:
Pipe shape: Circular	Pipe material: Clay ESVP	Pipe height: 12.0 in.	Pipe width:
Comments:			

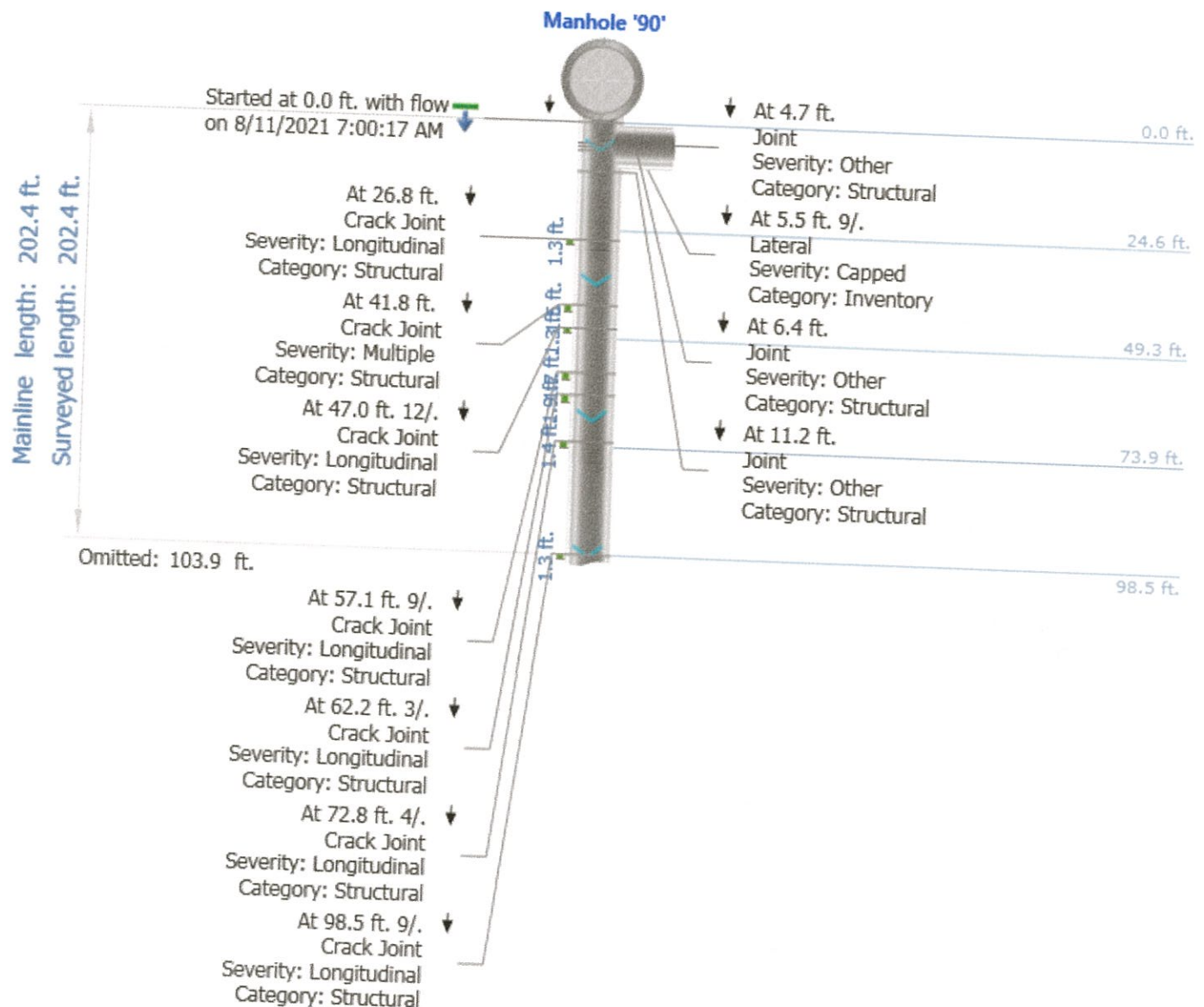
Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
86.8 ft.	D		12 /	Lateral			
154.9 ft.	D		/	Grouted			
174.8 ft.	D		10 /	Lateral Defects	Mineral Deposit		
381.1 ft.	D		/	Inspection	End		

Inspection's photos

Main Inspections Pipe Run

Project name: 8/11/21 RUMSON OSPREY LN DVD 3	Mainline ID: RUMSON OSPREY LN 90 TO 89	City: RUMSON NJ	Address: OSPREY LN
Start date/time: 8/11/2021 7:00 AM	Direction: With the flow	Weather: Dry	Surface condition: Asphalt
Pipe shape: Circular	Pipe material: Clay ESVP	Pipe height: 8.0 in.	Pipe width:



Project name:

8/11/21 RUMSON OSPREY
LN DVD 3

Mainline ID:

RUMSON OSPREY LN 90
TO 89

Start date/time:

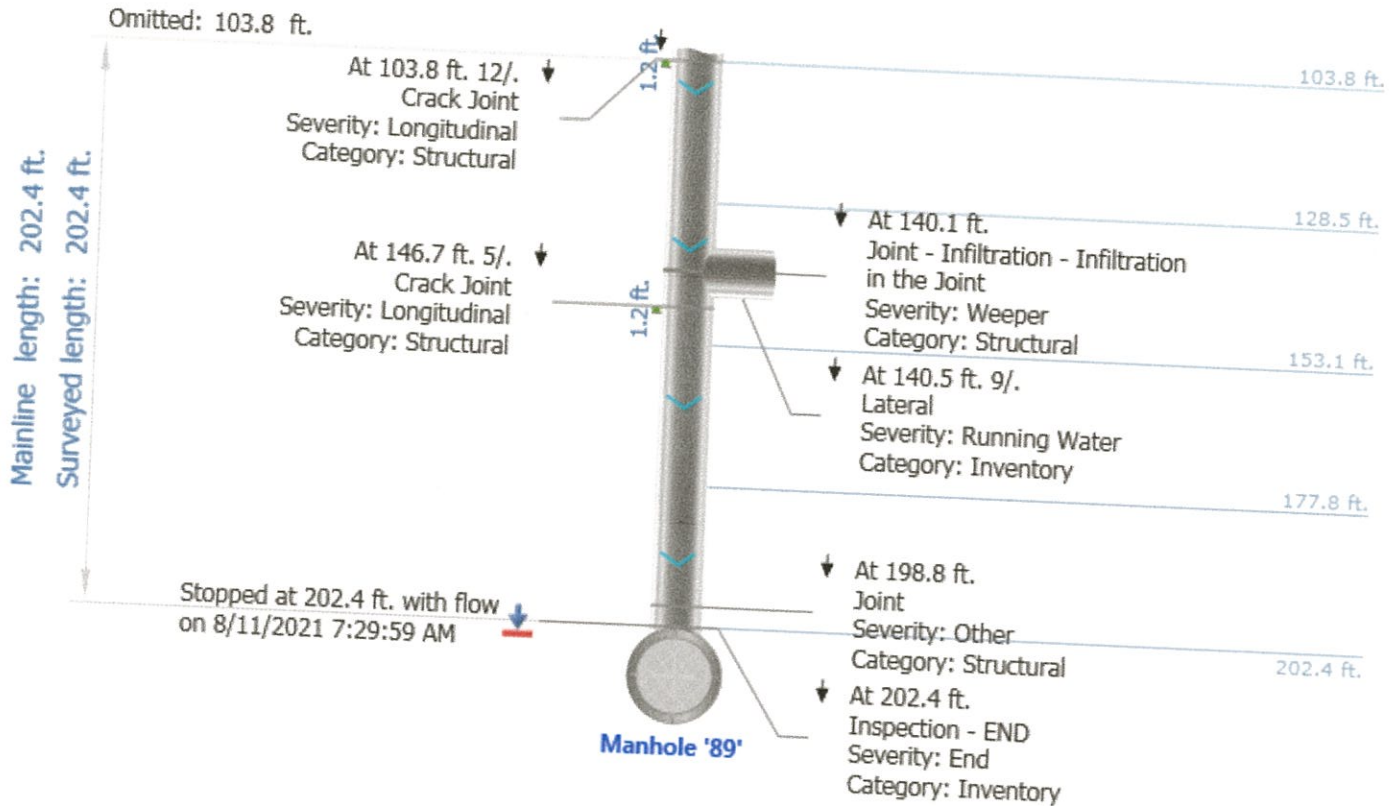
8/11/2021 7:00 AM

Direction:

With the flow

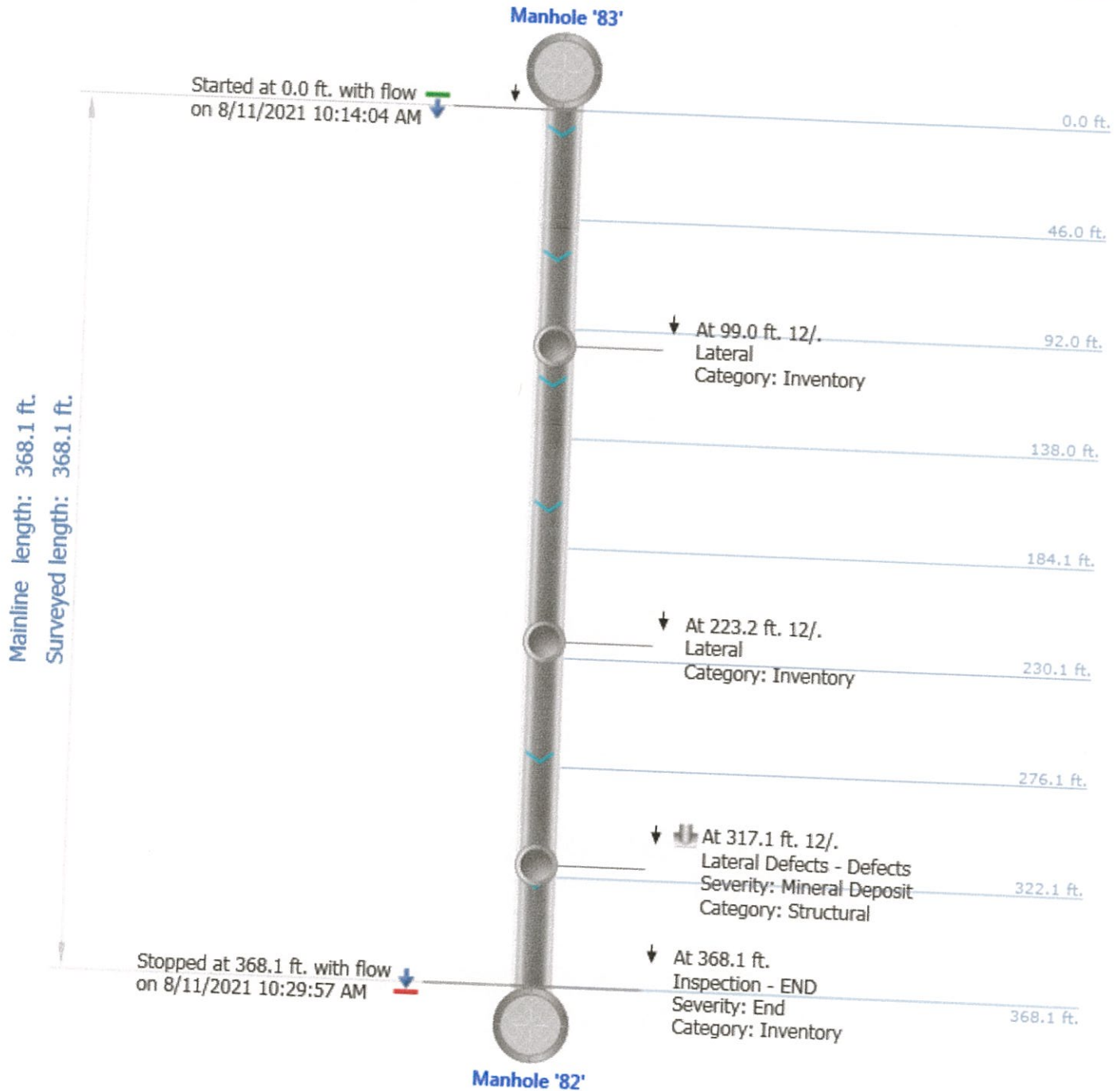
Weather:

Dry



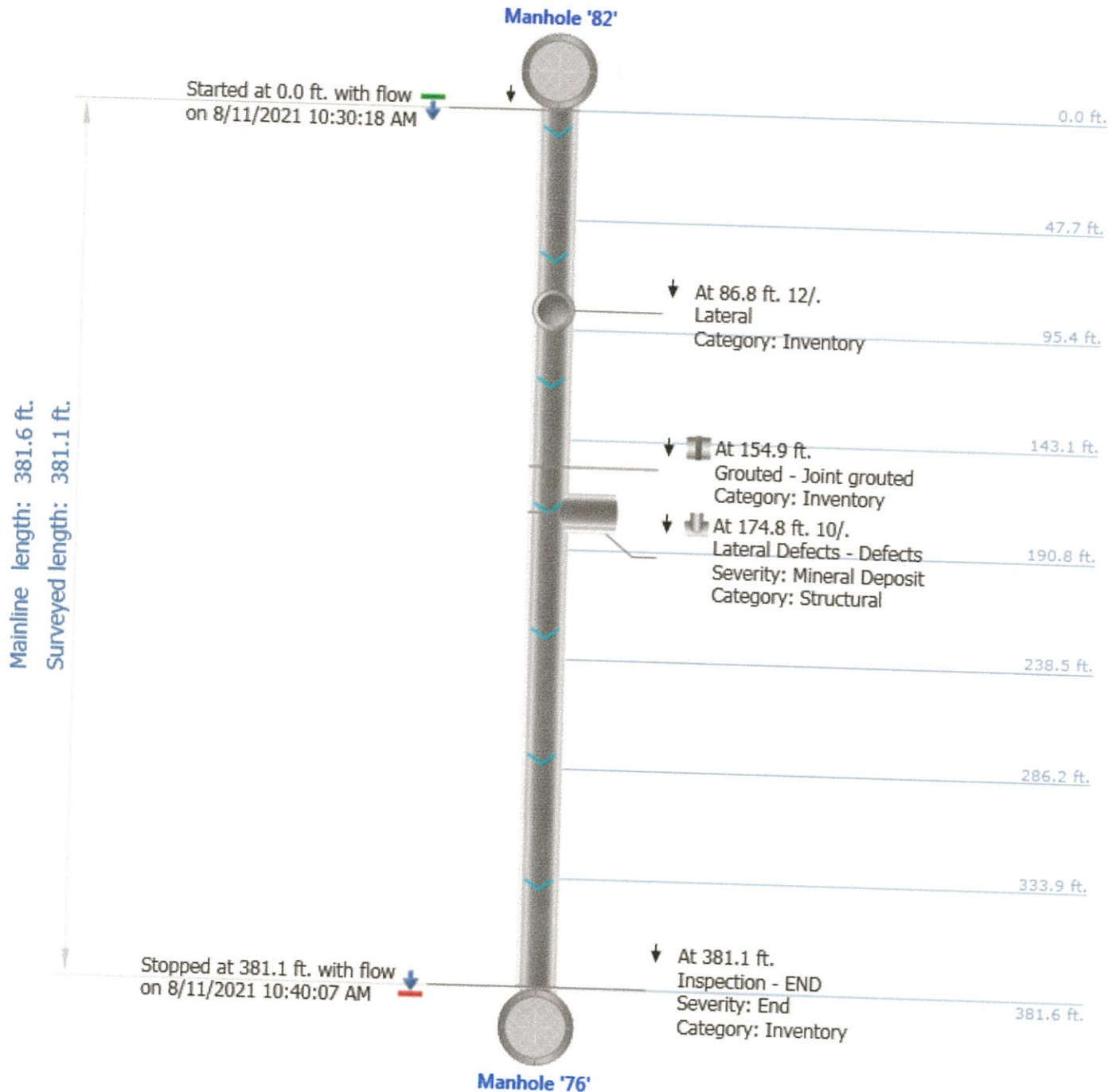
Main Inspections Pipe Run

Project name: 8/11/21 RUMSON OSPREY LN DVD 3	Mainline ID: RUMSON SHREWSBURY DR 83 TO 82	City: RUMSON NJ	Address: SHREWSBURY DR
Start date/time: 8/11/2021 10:14 AM	Direction: With the flow	Weather: Dry	Surface condition: Asphalt
Pipe shape: Circular	Pipe material: Clay ESVP	Pipe height: 12.0 in.	Pipe width:



Main Inspections Pipe Run

Project name: 8/11/21 RUMSON OSPREY LN DVD 3	Mainline ID: RUMSON SHREWSBURY DR 82 TO 76	City: RUMSON NJ	Address: SHREWSBURY DR
Start date/time: 8/11/2021 10:30 AM	Direction: With the flow	Weather: Dry	Surface condition: Asphalt
Pipe shape: Circular	Pipe material: Clay ESVP	Pipe height: 12.0 in.	Pipe width:



APPENDIX B

RIVERSIDE DRIVE SEWER LINE GROUTING ANALYSIS & PROJECT FINDINGS

Riverside Drive Pump Station
Sewer Line Grouting Analysis & Project Findings
April 2021

Analysis Period #1 - Pre- Pipe Joint Test and Seal Program			
May 22, 2019	to	March 5, 2020	288 Days in Study Period
	Operational Hours	Approximate Gallons ¹	Gallons Per Day
Pump #1	3,281	9,843,000	34,177
Pump #2	3,204	9,612,000	33,375
Total	6,485	19,455,000	67,552

Analysis Period #2 - Post- Pipe Joint Test and Seal Program			
May 22, 2020	to	March 5, 2021	287 Days in Study Period
	Operational Hours	Approximate Gallons ¹	Gallons Per Day
Pump #1	912	2,736,000	9,500
Pump #2	859	2,577,000	8,948
Total	1,771	5,313,000	18,448

Test and Seal Program Results (Period 2 - Period 1)			
	Operational Hours	Approximate Gallons	Gallons Per Day
	(4,714)	(14,142,000)	(49,275.26)
			Gallons Per Day Per Linear Foot (7.19)

Projected Annual Savings

Per 2018 Customer Town Bill from Authority		
2017 Actual Flows	544,320,000	GPY
2018 Actual Charges	\$ 1,645,592	
Cost per Gallon	\$ 0.003023	
Projected Annual Savings ²	\$ 42,754	

Per 2019 Customer Town Bill from Authority		
2018 Actual Flows	570,790,000	GPY
2019 Actual Charges	\$ 1,793,308	
Cost per Gallon	\$ 0.003142	
Projected Annual Savings ²	\$ 44,431	

Total Sanitary Sewer Rehabilitation Costs:		
Clean & TV inspection 2018	\$ 7,200.00	(portion of total \$35,200)
Test & seal all pipe joints 2020	\$ 53,580.00	
Total rehab cost:	\$ 60,780.00	
Total Linear Footage	6,850	
Rehab cost per linear foot	\$ 8.87	

Potential Rate of Return (using avg \$ savings) on Rehab Cost ³	1.17 Years
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Analysis Notes:
1 - Both pumps have minimum flowrates of 100 gallons per minute = 6,000 gallons per hour
For analysis purposes, we assume a flowrate of 50 gpm = 3,000 gph
2 - Does not include savings resulting from reduced electrical consumption, personnel hours, maintenance and repair costs, and equipment longevity factors.
3 - Based on estimates of 50% flowrate and assumes similar annual rainfall, similar annual groundwater elevations, and no other system changes.